TOSHIBA

FILE NO. 073-200312

SERVICE MANUAL

COLOR TELEVISION

N3WS Chassis

34HFX83

(TAC0321)

– SUMMARY –

34HFX83 is the same as 34HF83 except for the parts tabled on back of this sheet.
Use this service manual together with the service manual of 34HF83 (File No. 070-200307).

PUBLISHED IN JAPAN, Jun., 2003 (So)

REPLACEMENT PARTS LIST DIFFERENCES

Location No.	Part No.	Description
A201	23532042	Cover, Front Cover Assy
A401S	23532044	Cover, Back Cover Service
A701A	23067345	Carton, Top Case
C903	24436221	CD, 220pF
C905	24436221	CD, 220pF
C907	24436221	CD, 220pF
C909	24679330	EL, 33μF, ±20%, 250V
C913	24763102	EL, 1000μF, ±20%, 16V
C914	24092398	CD, 0.1μF, +80%, -20%, 25V
C918	24092398	CD, 0.1μF, +80%, -20%, 25V
C919	24092398	CD, 0.1μF, +80%, -20%, 25V
C963	24436331	CD, 330pF
C964	24436331	CD, 330pF
C965	24436331	CD, 330pF
C970	24214102	CD, 1000pF, ±10%, 500V
D916	23357012	Diode, 1SS244
D917	23357012	Diode, 1SS244
D918	23357012	Diode, 1SS244
D919	23357012	Diode, 1SS244
D926	23357012	Diode, 1SS244
D927	23357012	Diode, 1SS244
D928	23357012	Diode, 1SS244
D929	23357012	Diode, 1SS244
D949	23357012	Diode, 1SS244
D950	23357012	Diode, 1SS244
D951	23357012	Diode, 1SS244
D952	23357012	Diode, 1SS244
G908	24366560	CF, 56 ohm
G914	23118859	Diode, 1SS133
G915	23118859	Diode, 1SS133
G923	24366560	CF, 56 ohm
G924	23118859	Diode, 1SS133
G925	23118859	Diode, 1SS133
G941	24366560	CF, 56 ohm
G947	23118859	Diode, 1SS133
G948	23118859	Diode, 1SS133
G951	24366102	CF, 1k ohm
G966	24366102	CF, 1k ohm
G9880	24366102	CF, 1k ohm
H002	23148043	Module, IF, US WOW MSP3441G VDS, MVUS52
⚠L901	23289120	Coil, Peaking, TRF4120A
L902	23289689	Coil, Peaking, TRF46R8AF
L903	23289689	Coil, Peaking, TRF46R8AF
L904	23289689	Coil, Peaking, TRF46R8AF
L905	23289835	Coil, Peaking, TRF41R5AT
L906	23289835	Coil, Peaking, TRF41R5AT
L907	23289835	Coil, Peaking, TRF41R5AT
L908	23237987	Coil, Peaking, TRF4100A
L910	23103146	Coil (Ferrite Bead), TEM2030AA
L916	23289120	Coil, Peaking, TRF4120A
L924	23289120	Coil, Peaking, TRF4120A
Q901	23205159	Transistor, 2SC3942
Q902	23205165	Transistor, 2SC3950E
Q903	23205159	Transistor, 2SC3942
Q904	23205165	Transistor, 2SC3950E
Q905	23205159	Transistor, 2SC3942

Location No.	Part No.	Description
Q906	23205165	Transistor, 2SC3950E
Q930	23205158	Transistor, 2SC3790E
Q931	23205156	Transistor, 2SA1480E
Q933	23205158	Transistor, 2SC3790E
Q934	23205156	Transistor, 2SA1480E
Q936	23205158	Transistor, 2SC3790E
Q937	23205156	Transistor, 2SA1480E
Q961	23114433	Transistor, 2SC1815-Y
R901	24552101	OMF, 100 ohm, 1/2W
R902	24552101	OMF, 100 ohm, 1/2W
R903	24552101	OMF, 100 ohm, 1/2W
R907	24366560	CF, 56 ohm
R913	24366560	CF, 56 ohm
R914	24366101	CF, 100 ohm
R915	24366150	CF, 15 ohm
R916	24366330	CF, 33 ohm
R917	24366271	CF, 270 ohm
R918	24366330	CF, 33 ohm
R921	24366101	CF, 100 ohm
R922	24366150	CF, 15 ohm
R924	24366330	CF, 33 ohm
R925	24366271	CF, 270 ohm
R928	24366101	CF, 100 ohm
R929	24366150	CF, 15 ohm
R930	24366330	CF, 33 ohm
R933	24545829	FR, 8.2 ohm, 1/4W
R937	24366271	CF, 270 ohm
R940	24366560	CF, 56 ohm
R942	24366222	CF, 2200 ohm
R943	24366222	CF, 2200 ohm
R944	24366222	CF, 2200 ohm
R945	24366330	CF, 33 ohm
R946	24366330	CF, 33 ohm
R952	24366222	CF, 2200 ohm
R953	24366222	CF, 2200 ohm
R954	24366222	CF, 2200 ohm
R958	24366101	CF, 100 ohm
R961	24568472	Cement, 4700 ohm, 7W
R962	24568472	Cement, 4700 ohm, 7W
R964	24568472	Cement, 4700 ohm, 7W
R965	24568472	Cement, 4700 ohm, 7W
R966	24366331	CF, 330 ohm
R977	24366681	CF, 680 ohm
R978	24568472	Cement, 4700 ohm, 7W
R979	24568472	Cement, 4700 ohm, 7W
R980	24552101	OMF, 100 ohm, 1/2W
R981	24552101	OMF, 100 ohm, 1/2W
R982	24552101	OMF, 100 ohm, 1/2W
R9180	24366220	CF, 22 ohm
R9240	24366220	CF, 22 ohm
R9300	24366220	CF, 22 ohm
✻U001	23788935	SIGNAL Board, PD1086C
✻U004	23788433	CRT-D/SVM Board, PD1089
Y101	23566019	Owner's Manual, English/ French, 34HFX83
⚠Y160	23306504	Remote Hand Unit, CT-90164

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TOSHIBA

FILE NO. 070-200307

SERVICE MANUAL

COLOR TELEVISION

N3WS Chassis

34HF83

(TAC0322)

PUBLISHED IN JAPAN. May. 2003 (So)

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CIRCUIT DIAGRAM

CHAPTER 1 GENERAL ADJUSTMENTS

SAFETY INSTRUCTIONS

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" INSTRUCTIONS BELOW.

X-RAY RADIATION PRECAUTION

1. Excessive high voltage can produce potentially hazardous X-RAY RADIATION. To avoid such hazards, the high voltage must not be above the specified limit. The nominal value of the high voltage of this receiver is (A) kV at zero beam current (minimum brightness) under a 120V AC power source. The high voltage must not, under any circumstances, exceed (B) kV.

   Refer to table-1 for high voltage (A), (B).
   (See SETTING & ADJUSTING DATA on page 12)

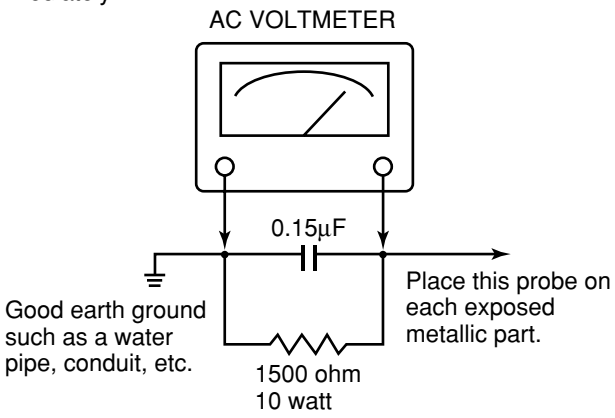
   Each time a receiver requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure in this manual. It is recommended that the reading of the high voltage be recorded as a part of the service record. It is important to use an accurate and reliable high voltage meter.
2. This receiver is equipped with a Fail Safe (FS) circuit which prevents the receiver from producing an excessively high voltage even if the B+ voltage increases abnormally. Each time the receiver is serviced, the FS circuit must be checked to determine that the circuit is properly functioning, following the FS CIRCUIT CHECK procedure in this manual.
3. The only source of X-RAY RADIATION in this TV receiver is the picture tube. For continued X-RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.
4. Some part in this receiver have special safety-related characteristics for X-RAY RADIATION protection. For continued safety, parts replacement should be undertaken only after referring to the PRODUCT SAFETY NOTICE below.

SAFETY PRECAUTION

WARNING : Service should not be attempted by anyone unfamiliar with the necessary precautions on this receiver. The following are the necessary precautions to be observed before servicing this chassis.

1. An isolation Transformer should be connected in the power line between the receiver and the AC line before any service is performed on the receiver.
2. Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Use shatter proof goggles and keep picture tube away from the unprotected body while handling.
3. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as; non-metallic control knobs, insulating covers, shields, isolation resistor-capacitor network etc.
4. Before returning the set to the customer, always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as antennas, terminals, screwheads, metal overlays, control shafts etc. to be sure the set is safe to operate without danger of electrical shock. Plug the AC line cord directly into a 120V AC outlet (do not use a line isolation transformer during this check). Use an AC voltmeter having 5000 ohms per volt or more sensitivity in the following manner:

   Connect a 1500 ohm 10 watt resistor, paralleled by a 0.15 μF, AC type capacitor, between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of 1500 ohm resistor and 0.15 μF capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 0.3 volts rms. This corresponds to 0.2 milliamp. AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.


AC VOLTMETER
0.15μF
Good earth ground such as a water pipe, conduit, etc.
Place this probe on each exposed metallic part.
1500 ohm
10 watt

PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the international hazard symbols on the schematic diagram and the parts list.
Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-ray radiation or other hazards.

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF SERVICE MANUAL.

SET-UP ADJUSTMENT FOR FLAT TUBE

■ The following adjustments should be made when a complete realignment is required or a new picture tube is installed. Perform the adjustments in order as follows :

1. Color Purity
2. Convergence
3. White Balance

Note: The PURITY/CONVERGENCE MAGNET assembly and rubber wedges need mechanical positioning. Refer to figure 1.

COLOR PURITY ADUSTMENT

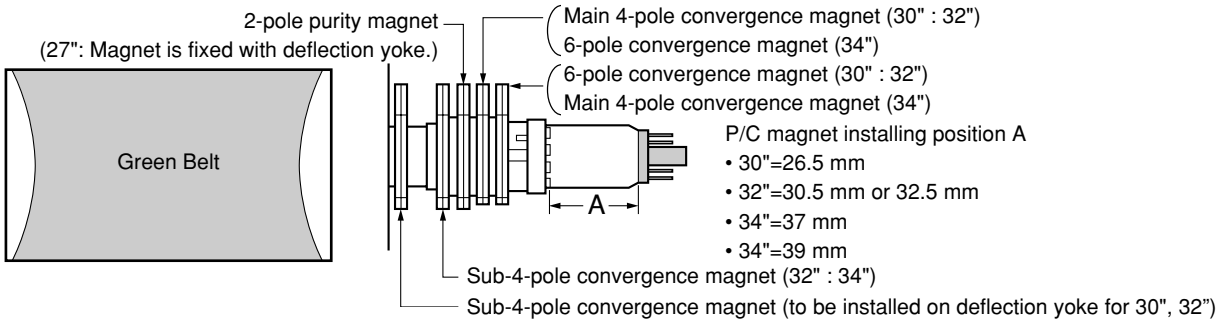
(1)Let the screen face in the installing direction or toward the east (when it is to be moved), bring up the service mode screen after demagnetizing (front, left, right, and top) with the degaussing coil, receive white signals by pressing the [TV/VIDEO] button, and then the receiver should be operated for more than 40 minutes.

(2)Perform rough adjustment of the central convergence with the P/C magnet according to the adjustment item.

(3)Receive built-in green signals, loosen set screws on the deflection yoke, remove rubber wedges, and shift the deflection yoke to toward front.

(4)Move alternately the two 2-pole magnets of the P/C magnets so that the green raster can come to the center of the screen.

Figure 1.

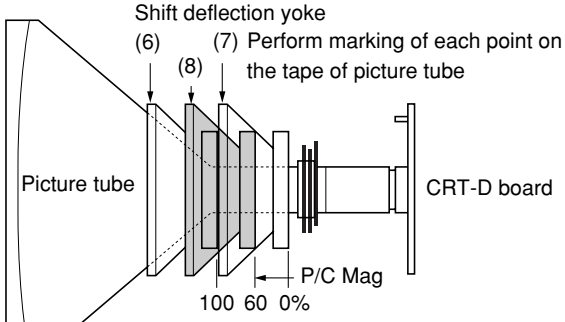

2-pole purity magnet
(27": Magnet is fixed with deflection yoke.)
Green Belt
Main 4-pole convergence magnet (30" : 32")
6-pole convergence magnet (34")
6-pole convergence magnet (30" : 32")
Main 4-pole convergence magnet (34")
A
P/C magnet installing position A
• 30"=26.5 mm
• 32"=30.5 mm or 32.5 mm
• 34"=37 mm
• 34"=39 mm
Sub-4-pole convergence magnet (32" : 34")
Sub-4-pole convergence magnet (to be installed on deflection yoke for 30", 32")

(5)Receive built-in red and blue signals, check that there is no inclination of the single color raster toward one side, and if each color tilts to a great extent, make adjustment with the 2-pole magnet so that the 3 colors will come to the center evenly.

(6)Receive the green raster, shift the deflection yoke from a foremost position (hitting against the picture tube) to a backward position horizontally, stop the deflection yoke at a position where it begins to become a green raster, and perform accurate marking on the picture tube.

(7)Shift the deflection yoke further backward, and perform accurate marking at a position where the green raster begins to being luck.

(8)Fix the deflection yoke at a position 60% forward within the range marked in items (6) and (7) above.



Fix the deflection yoke at a position 60% forward from a point between (6) and (7)

CONVERGENCE ADJUSTMENTS

* Adjust the convergence magnet to get vest convergence in the the order to (1) ~ (5).

■ CENTER CONVERGENCE:

(1)Receive the white crosshatch or dot pattern from the service signal generator.

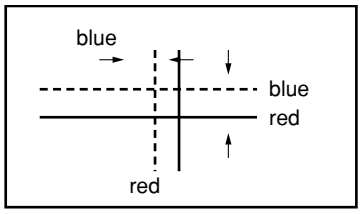
(2)Use the 2 pieces of main 4-pole magnets of P/C magnets, change the open angle, and align the red and blue vertical lines on the screen center.

(3)Freeze the open angle of the main 4-pole magnets, turn them simultaneously, and align the horizontal lines.

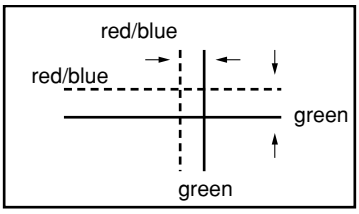
(4)Take the same steps for items (2) and (3) above and align red/blue with green on the screen center using two 6-pole magnets.

(5) Adjust the sub-4-pole magnets only in case there is any deviation of Xv bow-shaped convergence. (To be usually set at the initial position)

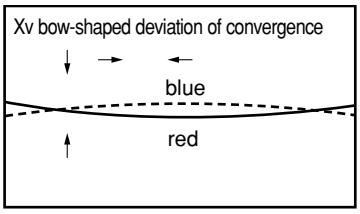
Align both sides with the sub-4-pole magnets and minimize the deviation of blue and red with the main 4-pole magnets.



Main 4-pole magnet



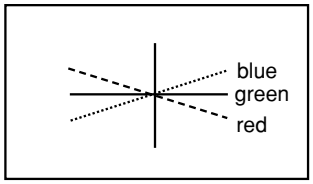
6-pole magnet

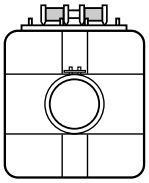


Sub-4-pole magnet

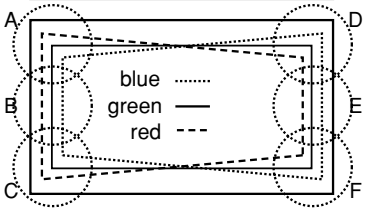
■ CIRCUMFERENCE CONVERGENCE:

* Perform correction in the following manner.

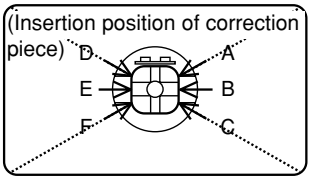




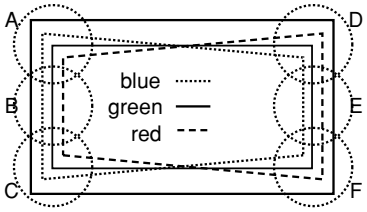
• Adjust coils and minimize deviation
(The 27" unit has coils underneath it)



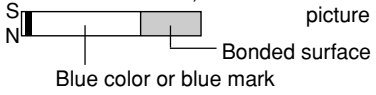
(Parts code:23 948 274) TC-S

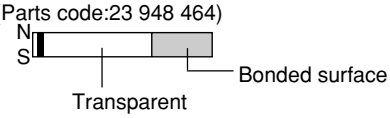


*Insert the correction piece between the picture tube and the deflection yoke.

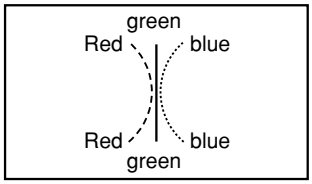


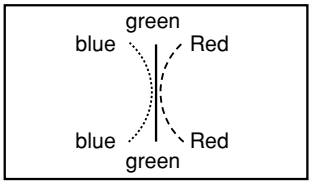
(Parts code:23 948 464)



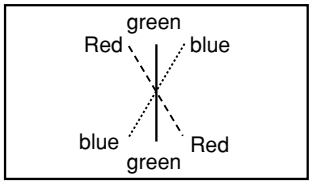


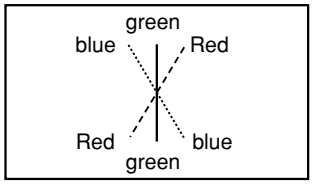
Adjust VR 1 and minimize the deviation of YH. *Only 27", 30" and 32".



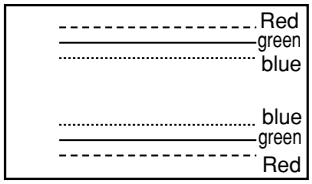


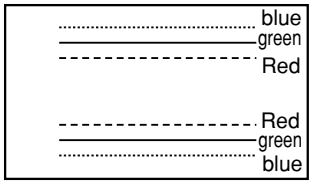
Adjust VR 2 (YHC) and minimize the deviation of YH.

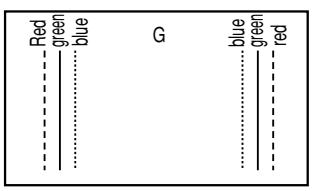


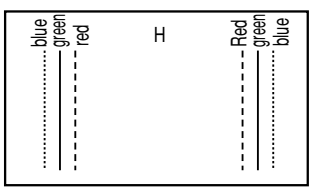


Adjust VR 3 (YV) and minimize the deviation of YV.

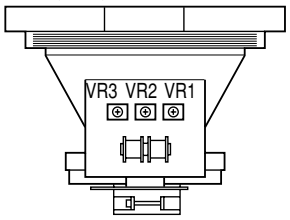




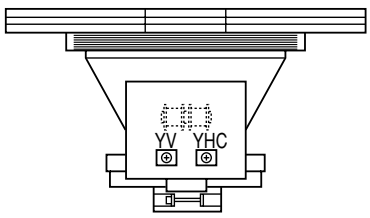




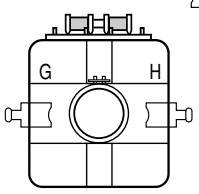
■ 30", 27", 32"



■ 34"



27" (Part No. 23 947 371)
32", 30" (Part No. 23 947 121)
34" (Part No. 23 993 080)



Perform correction by inserting the correction piece into the clearance of terminal board coils of the deflection yoke.

Note:

Perform insertion by turning the metal side to the terminal board side of the deflection yoke.

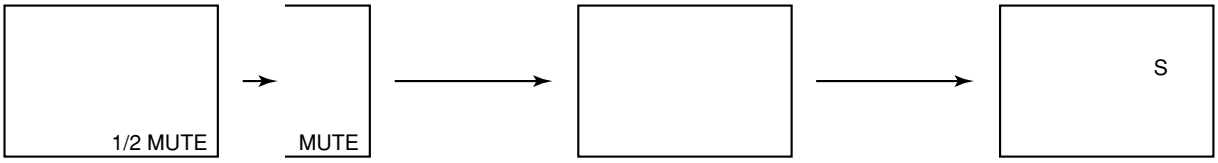
SERVICE MODE

1. ENTERING TO SERVICE MODE

1) Press MUTE button twice on Remote Control.

2) Press MUTE button again to keep pressing.

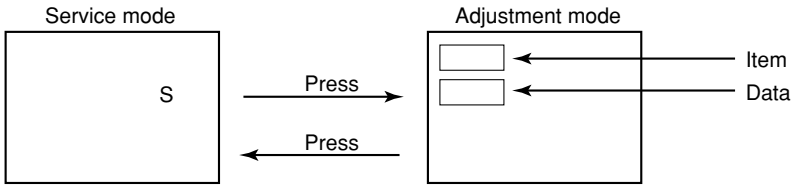
3) While pressing the MUTE button, press MENU button on TV set.



(Service mode display)

2. DISPLAYING THE ADJUSTMENT MENU

1) Press MENU button on TV.



3. KEY FUNCTION IN THE SERVICE MODE

The following key entry during display of adjustment menu provides special functions.

A single horizontal line ON/OFF:	TV (ANT)/VIDEO button (on TV)
Test signal selection :	TV (ANT)/VIDEO button (on Remote)
Selection of the adjustment items :	Channel ▲/▼ (on TV or Remote)
Change of the data value :	Volume ▲/▼ (on TV or Remote)
Adjustment menu mode ON/OFF :	MENU button (on TV)
Initialization of the memory (QA02, QA04) :	RECALL+Channel (▲) button on TV
Initialization of the self diagnostic data:	RECALL+Channel (▼) button on TV

“RCUT” selection :	1 button
“GCUT” selection :	2 button
“BCUT” selection :	3 button
“CNTX” selection :	4 button
“COLC” selection :	5 button
“TNTC” selection :	6 button
Test audio signal ON/OFF (1kHz) :	8 button
Self diagnostic display ON/OFF :	9 button

4. SELECTING THE ADJUSTING ITEMS

1) Every pressing of CHANNEL ▲ button in the service mode changes the adjustment items in the order of table-2. (▼ button for reverse order)

Refer to table-2 for preset data of adjustment mode.
(See SETTING & ADJUSTING DATA on page 12)

5. ADJUSTING THE DATA

1) Pressing of VOLUME ▲ or ▼ button will cahnge the value of data in the range from 00H to FFH. The variable range depends on the adjusting item.

6. EXIT FROM SERVICE MODE

1) Pressing POWER button to turn off the TV once.

■ INITIALIZATION OF MEMORY DATA OF QA02 AND QA04

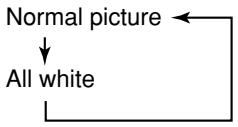
After replacing QA02 and QA04, the following initialization is required.

1. Enter the service mode, then select any register item.
2. Press and hold the RECALL button on the Remote, then press the CHANNEL ▲ button on the TV. The initialization of QA02 and QA04 has been complated.
3. Check the picture carefully. If necessary, adjust any adjustment item above.
   Perform “Programming Channel Memory” on the owner's manual.

CAUTION: Never attempt to initialize the data unless QA02, QA04 has been replaced.

7. TEST SIGNAL SELECTION

1) Every pressing of TV/VIDEO button on the Remote Control in the Service mode changes the built-in test patterns on screen in the following order.



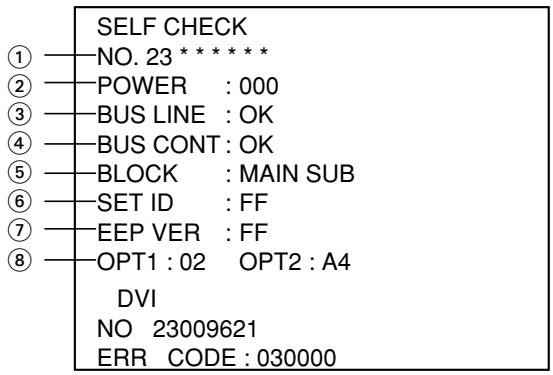
Signals	Picture
• All White	

2) Press “8” button while any built-in test pattern to on the screen to output the 1 kHz sound. Press the button again to cut off the sound.

Note: If the video cable is connected to the VIDEO1 INPUT jack, the built-in pattern signals are not displayed.

8. SELF DIAGNOSTIC FUNCTION

1) Press “9” button on Remote Control during display of adjustment menu in the service mode.
   The diagnosis will begin to check if interface among IC’s are executed properly.
2) During diagnosis, the following displays are shown.


SELF CHECK
① NO. 23 * * * * * *
② POWER : 000
③ BUS LINE : OK
④ BUS CONT : OK
⑤ BLOCK : MAIN SUB
⑥ SET ID : FF
⑦ EEP VER : FF
⑧ OPT1 : 02 OPT2 : A4
DVI
NO 23009621
ERR CODE : 030000

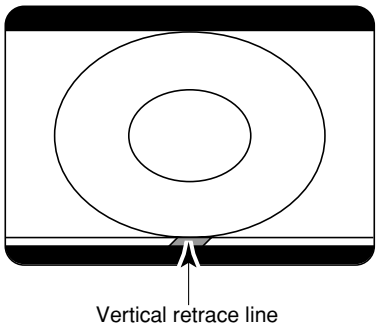
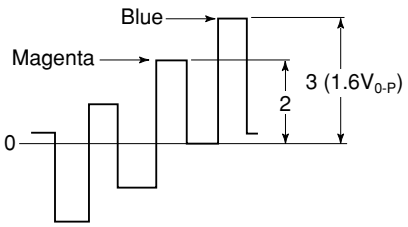
① Part number of microprocessor (QA01)
② Operation number of protection circuit (current limiter) . . . . “000” is normal.
③ BUS line check
- “OK” ..... Normal
- “SCL-GND” or “NG” ..... SCL-GND short circuit
- “SDA-GND” or “NG” ..... SDA-GND short circuit
- “SCL-SDA” or “NG” ..... SCL-SDA short circuit

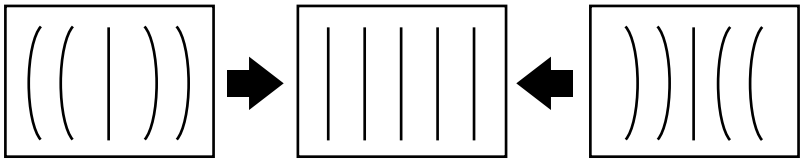
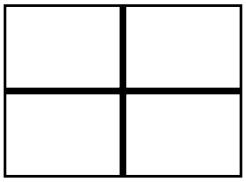
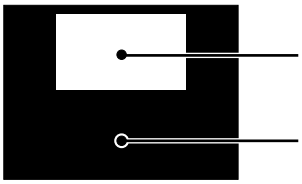
④ BUS line ACK (acknowledge) check
- “OK” ..... Normal
- Display of Location Number . . . . NG
- (Display example)
- “QA02 NG”, “H001 NG”, “Q501 NG” etc.
- Note: The indication of failure place is only one place though failure places are plural. When repair of a failure place finishes, the next failure place is indicated. (The order of priority of indication is left side.)

⑤ Sync. signal check
- Green display ..... Normal
- Cyan display ..... No check
- Red display ..... NG
  - MAIN ..... Main sync
  - SUB ..... Sub sync (when turn on the PIP)

⑥ ID code for TV set
⑦ Version of "EEP"
⑧ Data for "OPT"

ELECTRICAL ADJUSTMENTS

ITEM	ADJUSTMENT PROCEDURE
FOCUS VR ADJ	1. Enter the service mode, then select any register item. 2. Press the TV/VIDEO button on the Remote until the black cross-bar pattern appears on the screen. 3. Adjust the FOCUS control (on T461) for well defined scanning lines on the picture screen.
SUB-BRIGHTNESS (BRTC)	1. Constrict the picture height until the vertical retrace line appears adjusting the item HIT (HEIGHT). 2. Adjust the CONTRAST control to the minimum. 3. Call up the adjustment mode display, then select the item **BRTC**. 4. Press the VOLUME ▲ or ▼ button so the belt of vertical retrace line just disappear. 5. Adjust the CONTRAST control for the desired contrast. 6. Perform the HEIGHT adjustment. 
SUB-COLOR (SCOL) SUB-TINT (TNTC)	1. Receive color-bar signal from color-bar generator. 2. Press the RESET button. 3. Connect oscilloscope to TP501 on SIGNAL board. 4. Adjust the CONTRAST control to the minimum. 5. Call up the adjustment mode display, then select the item **TNTC**. 6. Adjust the SUB-TINT by pressing the VOLUME ▲ or ▼ button to obtain a blue bar to magenta bar ratio of 3:2 as shown.  7. Press the RESET button. 8. Select the item **SCOL**. 9. Adjust the SUB-COLOR by pressing the VOLUME ▲ or ▼ button to achieve 1.6$V_{0\text{-}p}$ of a blue bar on scope. 10. Check the picture with off-air signal.
WIDTH (WID)	1. Call up the adjustment mode display, then select the item **WID**. 2. Press the VOLUME ▲ or ▼ button to get the picture so the left and right edges of raster begins to lack. 3. Press the VOLUME ▲ or ▼ button to advance the data by 7 steps. Note : Check the horizontal picture position is correct.

ITEM	ADJUSTMENT PROCEDURE
E-W PARABOLA (DPC) (PARA)	1. Call up the adjustment mode display, then select the item **PARA**. 2. Press the TV/VIDEO button on Remote until the cross-hatch pattern appears on the screen. 3. Press the VOLUME ▲ or ▼ button to make vertical lines straight as shown below. 
HORIZONTAL POSITION (HPOS) VERTICAL POSITION (VPOS)	1. Call up the adjustment mode display, then select the item **HPOS** or **VPOS**. 2. Press the TV/VIDEO button on Remote until the white cross-bar or black cross-bar pattern appears on the screen. 3. Adjust the HORIZONTAL and VERTICAL position alternately by pressing the VOLUME ▲ or ▼ button for proper picture position. 4. Check the picture with off-air signal. 
HEIGHT (HIT)	1. Call up the adjustment mode display, then select the item **HIT**. 2. Press the VOLUME ▲ or ▼ button to get the picture so the top of raster begins to lack. 3. Press the VOLUME ▲ button to advance the data by 9 steps. Note : Check the vertical picture position is correct.
WHITE BALANCE (RCUT) (GCUT) (BCUT) (GDRV) (BDRV)	1. Adjust the CONTRAST control to the center, and BRIGHTNESS control to the maximum. 2. Call up the adjustment mode display, and press the TV/VIDEO button on Remote until the white and black pattern appears on the screen. 3. Adjust the following items with the CHANNEL ▲/▼ and VOLUME ▲/▼ buttons. Item : RCUT ⟶ Data : 40H Item : GCUT ⟶ Data : 40H Item : BCUT ⟶ Data : 40H Item : GDRV ⟶ Data : 40H Item : BDRV ⟶ Data : 40H 4. Press the TV/VIDEO button on TV to display a single horizontal line on the screen. 5. Turn the SCREEN control (FBT) fully counterclockwise and gradually rotate clockwise until the first horizontal line appears slightly on the screen. 6. Press the TV/VIDEO button to display the normal picture. 7. Adjust the remaining two "?CUT" items (CHANNEL ▲/▼ → TV/VIDEO → VOLUME ▲/▼ in order) to obtain the slightly lighted horizontal line in the same levels of three (red, green, blue) colors. The line should be white if the adjustments are proper.  Bright area Adjust "GDRV" or "BDRV" to be white. Dark area Fine adjust "RCUT", "GCUT" or "BCUT" to be black.

CIRCUIT CHECKS

HIGH VOLTAGE CHECK

CAUTION: There is no HIGH VOLTAGE ADJUSTMENT on this chassis. Checking should be done following the steps below.

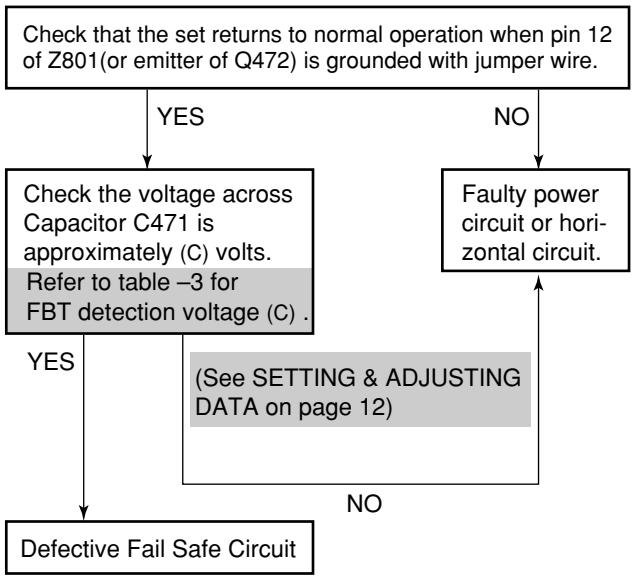
1. Connect an accurate high voltage meter to the second anode of the picture tube.
2. Turn on the receiver. Set the BRIGHTNESS and CONTRAST controls to minimum (zero beam current).
3. High voltage must be measured below (B) kV.
   Refer to table-1 for high voltage (B).
   (See SETTING & ADJUSTING DATA on page 12)
4. Vary the BRIGHTNESS control to both extremes to be sure the high voltage does not exceed the limit under any conditions.

FS CIRCUIT CHECK

The Fail Safe (FS) circuit check is indispensable for the final check in servicing. Checking should be done following the steps below.

1. Turn the receiver on and press the RESET button.
2. Temporarily short TP-(R) and TP-(X) with a jumper wire. Raster and sound will disappear.
3. The receiver must remain in this state even after removing the jumper wire. This is the evidence that the FS circuit is functioning properly.
4. To obtain a picture again, temporarily turn the receiver off and allow the FS circuit more than 5 seconds to reset. Then turn the power switch on to produce a normal picture.

Troubleshooting Guide for Fail Safe Circuit


Check that the set returns to normal operation when pin 12 of Z801(or emitter of Q472) is grounded with jumper wire.
YES
NO
Check the voltage across Capacitor C471 is approximately (C) volts.
Refer to table –3 for FBT detection voltage (C) .
Faulty power circuit or horizontal circuit.
YES
(See SETTING & ADJUSTING DATA on page 12)
NO
Defective Fail Safe Circuit

CHAPTER 2 SPECIFIC INFORMATIONS

SETTING & ADJUSTING DATA

【 SAFETY INSTRUCTIONS 】

		34"
HIGH VOLTAGE AT ZERO BEAM:	(A)	30.0 kV
MAX HIGH VOLTAGE:	(B)	35.0 kV

Table-1

【 SERVICE MODE 】

ADJUSTING ITEMS AND DATA IN THE SERVICE MODE:

Item	Name of adjustment	Preset	NORMAL & FULL
RCUT	R CUT OFF (Basis)	40H	←
GCUT	G CUT OFF (Basis)	40H	←
BCUT	B CUT OFF (Basis)	40H	←
GDRV	G DRIVE (Basis 1,4,7,10)	40H	←
BDRV	B DRIVE (Basis 1,4,7,10)	40H	←
BRTC	BRIGHT CENTER (1-12)	80H	←
TNTC	TINT CENTTER (1,2,3)	46H	←
SCNT	SUB CONTRAST (1,2,3)	15H	12H
HIT	PICTURE HIT (1080)	38H	24H

Item	Name of adjustment	Preset	NORMAL & FULL
LIN	V-LINEARITY (1080)	12H	←
WID	PICTURE WIDTH (1080)	00H	20H
PARA	E-W PARABOLA (1080)	16H	←
CNR	EW M CORRECTION	15H	←
TRAP	EW TRAPEZIUM	35H	←
HPS	H-POSITION	39H	46H
TCNR	EW TOP CORNER (1080)	14H	←
BCNR	EW BOTTOM COR (1080)	10H	←
VPSI	VTRAP (VPS1) (1080)	82H	6DH

Table-2

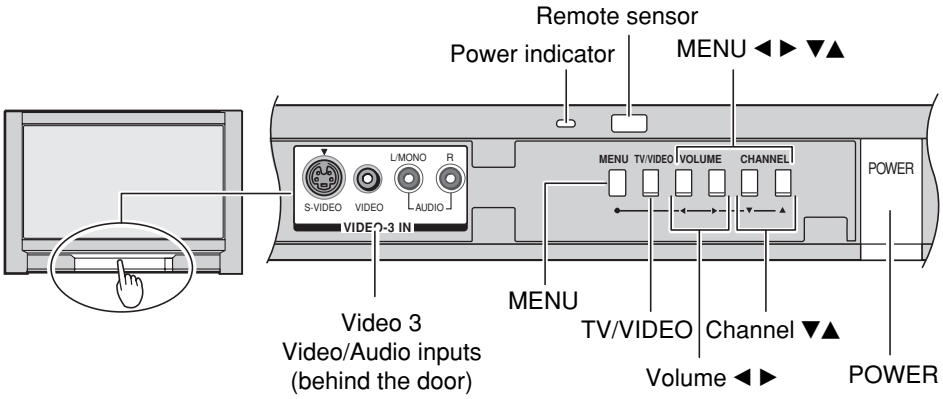
【 CIRCUIT CHECKS 】

FBT DETECTION VOLTAGE	(C)	20.1 V

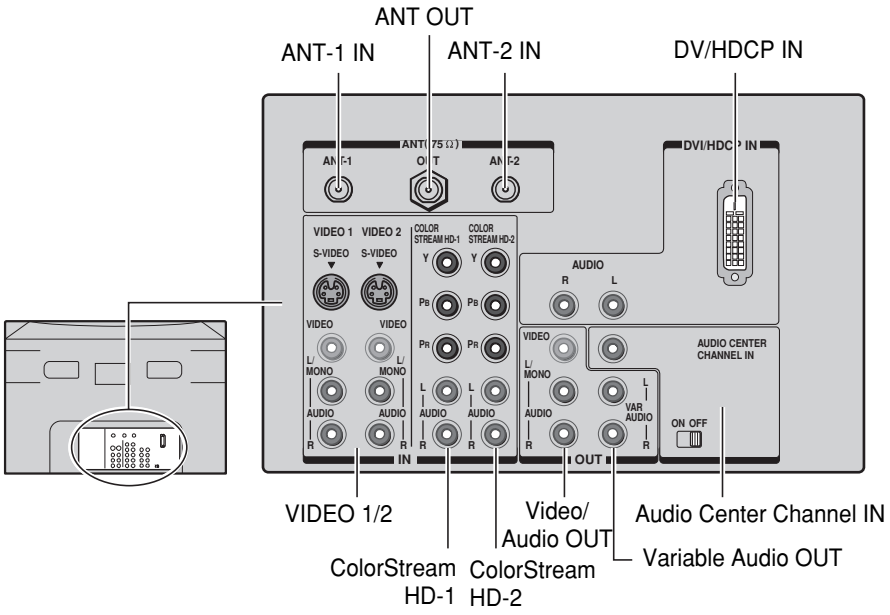
Table-3

LOCATION OF CONTROLS

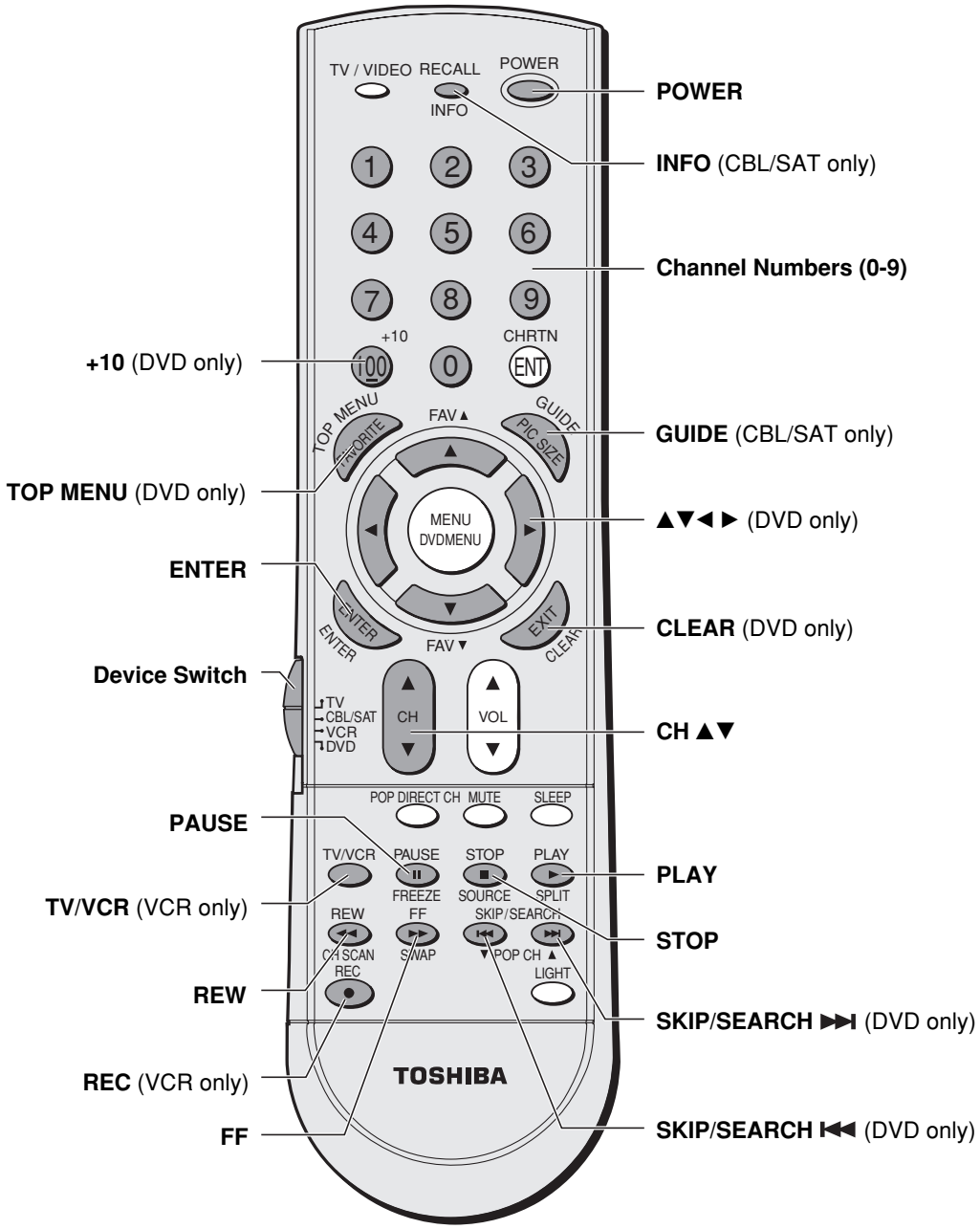
TV Front



TV Rear



Remote Control



ADDING CHANNELS TO THE TV'S MEMORY

When you press Channel ▲ or ▼, your TV will stop only on the channels stored in the TV's channel memory. Follow the steps below to program all active channels into the TV's memory.

Programming channels automatically
Your TV can automatically detect all active channels in your area and store them in its memory. After the channels are stored automatically, you can manually add or erase individual channels (see "Adding and erasing channels manually," below).

To program channels automatically:

1 Press MENU, and then press ◄ or ► until the SET UP menu appears.

2 Press ▲ or ▼ until the TV/CABLE is highlighted.

3 Press ◄ or ► to highlight either TV or CABLE, depending on which you use. If you use an antenna, highlight TV; if you use cable, highlight CABLE.

4 Press ▼ to select CH PROGRAM.

5 Press ◄ or ► to start channel programming. The TV will automatically cycle through all the TV or Cable channels (depending on which you selected), and store all active channels in the channel memory.
While the TV is cycling through the channels, the message "Programming Now—Please Wait" appears.

6 When channel programming is complete, the message "Completed" appears.

7 Press Channel ▲ or ▼ to view the programmed channels.

Adding and erasing channels manually
After you have programmed the channels automatically, you can manually add or erase specific channels.

To add or erase channels:

1 Select the channel you want to add or erase. If you are adding a channel, you must select the channel using the Channel Number buttons.

2 Press MENU, and then press ◄ or ► until the SET UP menu appears.

3 Press ▲ or ▼ to highlight ADD/ERASE.

4 Press ◄ or ► to select ADD or ERASE, depending on the function you want to perform.

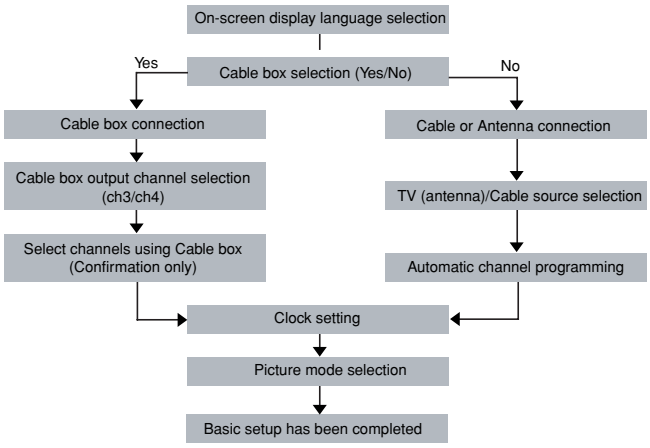
5 Repeat steps 1-4 for other channels you want to add or erase.

Using the Quick Connect Guide
The Quick Connect Guide automatically starts the first time the TV is turned on.
You can change the current settings any time.

1 Press MENU, and then press ◄ or ► until the SET UP menu appears.

2 Press ▲ or ▼ to highlight "QUICK CONNECT GUIDE".

3 Press ◄ or ► to enter the Quick Connection Guide mode.
Advance the setup according to the guide displayed on the screen.
You can set up the following items.



CHASSIS AND CABINET REPLACEMENT PARTS LIST

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE. Do not degrade the safety of the receiver through improper servicing.

NOTICE:
- *The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.*
- *The PC board assembly with ∗mark is no longer available after the end of the production.*

Model : 34HF83

Capacitors	CD	:	Ceramic Disk	PF	:	Plastic Film	EL	: Electrolytic
Resistors	CF	:	Carbon Film	CC	:	Carbon Composition	MF	: Metal Film
	OMF	:	Oxide Metal Film	VR	:	Variable Resistor	FR	: Fusible Resistor

(All CD and PF capacitors are ±5%, 50V and all resistors, ±5%, 1/6W unless otherwise noted.)

Location No.	Parts No.	Description
CAPACITORS		
C101	24796339	ELECTROLYTIC CE04G 35V 3.3UF M
C102	24665221	ELECTROLYTIC, 10V 220UF M 3A
C105	24100102	CERAMIC CHIP, 50V F 1000PF Z
C106	24669479	ELECTROLYTIC, 50V 4.7UF M 3A
C107	24666221	ELECTROLYTIC, 16V 220UF M 3A
C112	24665221	ELECTROLYTIC, 10V 220UF M 3A
C115	24100102	CERAMIC CHIP, 50V F 1000PF Z
C117	24666221	ELECTROLYTIC, 16V 220UF M 3A
C118	24665221	ELECTROLYTIC, 10V 220UF M 3A
C201	24109103	CERAMIC CHIP, 50V B 0.01UF K
C205	24766229	ELECTROLYTIC, 50V 2.2UF M
C206	24794220	ELECTROLYTIC, 16V 22UF M
C307	24693823	PLASTIC FILM CQ921 M 100V 0.082MF J
C308	24668221	ELECTROLYTIC, 35V 220UF M 3A
C309	24212101	CERAMIC DISC, 50V B 100PF K
C310	24667102	ELECTROLYTIC, 25V 1000UF M 3A
C311	24214152	CERAMIC DISC, 500V B 1500PF K
C313	24082057	PLASTIC FILM, 100V 0.22UF J
C314	24591563	PLASTIC FILM, 50V 0.056UF J
C320	24667221	ELECTROLYTIC, 25V 220UF M 3A
C322	24539105	PLASTIC FILM, 50V 1UF J
C323	24539105	PLASTIC FILM, 50V 1UF J
C325	24591203	PLASTIC FILM, 50V 0.02UF J
C326	24669010	ELECTROLYTIC, 50V 1UF M 3A
C327	24073041	ELECTROLYTIC, 16V 470UF M 3A
C331	24667102	ELECTROLYTIC, 25V 1000UF M 3A
C332	24591562	PLASTIC FILM, 50V 5600PF J
C333	24109332	CERAMIC CHIP, 50V B 3300PF K
C362	24591123	PLASTIC FILM, 50V 0.012MF J
C370	24666100	ELECTROLYTIC, 10V 10UF M 3A
C402	24092463	CERAMIC CHIP, 16V B 0.22UF K
C404	24669229	ELECTROLYTIC, 50V 2.2UF M 3A
C406	24109223	CERAMIC CHIP, 25V B 0.022UF K
C410	24109221	CERAMIC CHIP, 50V B 220PF K
C413	24214392	CERAMIC DISC, 500V B 3900PF K
C416	24676330	ELECTROLYTIC, 100V 33UF M 3A
C417	24214391	CERAMIC DISC, 500V B 390PF K
C418	24667221	ELECTROLYTIC, 25V 220UF M 3A

Location No.	Parts No.	Description
C424	24763101	ELECTROLYTIC, 16V 100UF M
C425	24763101	ELECTROLYTIC, 16V 100UF M
⚠ C428	24503192	PLASTIC FILM, 400V 0.15UF J
C432	24763101	ELECTROLYTIC, 16V 100UF M
C439	24503459	PLASTIC FILM, 400V 0.068UF J
⚠ C442	24503190	PLASTIC FILM, 400V 0.12UF J
⚠ C443	24503348	PLASTIC FILM, 1800VH 3900PF H
⚠ C444	24503196	PLASTIC FILM CF92 T 1800VH 5600PF H
C445	24095804	PLASTIC FILM, 400V 0.056UF J
C446	24073120	ELECTRPLYTIC, 250V 33UF, 250YXF33M
C448	24073118	ELECTROLYTIC, 160V 33UF M
C449	24667102	ELECTROLYTIC, 25V 1000UF M 3A
C450	24092341	CERAMIC DISC, 2KV R 470PF K
C451	24092341	CERAMIC DISC, 2KV R 470PF K
C452	24820103	PLASTIC FILM, 630V 0.01UF J
⚠ C461	24820123	PLASTIC FILM, 630V 0.012UF J
C464	24503149	PLASTIC FILM, 250V 3.3UF
C465	24591183	PLASTIC FILM, 50V 0.018UF J
C466	24679220	ELECTROLYTIC, 250V 22UF M 3A
⚠ C467	24820123	PLASTIC FILM, 630V 0.012UF J
C468	24591823	PLASTIC FILM, 50V 0.082UF J
C469	24591122	PLASTIC FILM, 50V 1200PF J
C470	24766220	ELECTROLYTIC, 50V 22UF M
C471	24766479	ELECTROLYTIC, 50V 4.7UF M
C472	24539474	PLASTIC FILM, 50V 0.47UF J
C476	24214471	CERAMIC DISC, 500V B 470PF K
C477	24666220	ELECTROLYTIC, 16V 22UF M 3A
C482	24109122	CERAMIC CHIP, 50V B 1200PF K
C488	24666100	ELECTROLYTIC, 10V 10UF M 3A
C502	24092730	CERAMIC CHIP, 16V B 0.1UF K
C503	24666471	ELECTROLYTIC, 16V 470UF M 3A
C508	24092730	CERAMIC CHIP, 16V B 0.1UF K
C509	24666101	ELECTROLYTIC, 16V 100UF M 3A
C513	24109103	CERAMIC CHIP, 50V B 0.01UF K
C515	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C520	24567334	PLASTIC FILM, 50V 0.33UF J
C524	24109103	CERAMIC CHIP, 50V B 0.01UF K
C525	24109103	CERAMIC CHIP, 50V B 0.01UF K
C526	24109103	CERAMIC CHIP, 50V B 0.01UF K

Location No.	Parts No.	Description
C527	24109103	CERAMIC CHIP, 50V B 0.01UF K
C528	24109103	CERAMIC CHIP, 50V B 0.01UF K
C529	24109103	CERAMIC CHIP, 50V B 0.01UF K
C533	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C534	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C535	24109103	CERAMIC CHIP, 50V B 0.01UF K
C536	24109103	CERAMIC CHIP, 50V B 0.01UF K
C537	24109103	CERAMIC CHIP, 50V B 0.01UF K
C538	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C540	24092538	CERAMIC CHIP, 10V F 1UF Z
C541	24092538	CERAMIC CHIP, 10V F 1UF Z
C542	24092538	CERAMIC CHIP, 10V F 1UF Z
C547	24109103	CERAMIC CHIP, 50V B 0.01UF K
C563	24797010	ELECTROLYTIC, 50V 1UF M
C564	24797229	ELECTROLYTIC, 50V 2.2UF M
C568	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C571	24109103	CERAMIC CHIP, 50V B 0.01UF K
C582	24761102	ELECTROLYTIC, 6.3V 1000UF M
C583	24761102	ELECTROLYTIC, 6.3V 1000UF M
C584	24797010	ELECTROLYTIC, 50V 1UF M
C585	24109103	CERAMIC CHIP, 50V B 0.01UF K
C586	24761102	ELECTROLYTIC, 6.3V 1000UF M
C612	24668101	ELECTROLYTIC, 35V 100UF M 3A
C613	24109103	CERAMIC CHIP, 50V B 0.01UF K
C617	24073034	ELECTROLYTIC, 16V 10UF M 3A
C661	24109122	CERAMIC CHIP, 50V B 1200PF K
C662	24109122	CERAMIC CHIP, 50V B 1200PF K
C664	24073035	ELECTROLYTIC, 16V 22UF M 3A
C665	24794100	ELECTROLYTIC, 16V 10UF M
C671	24669100	ELECTROLYTIC, 50V 10UF M 3A
C672	24669479	ELECTROLYTIC, 50V 4.7UF M 3A
C673	24073084	ELECTROLYTIC, 50V 4.7UF M 3A
C676	24503041	PLASTIC FILM , 63V 0.1UF J
C677	24503041	PLASTIC FILM , 63V 0.1UF J
C678	24073084	ELECTROLYTIC, 50V 4.7UF M 3A
C679	24667470	ELECTROLYTIC, 25V 47UF M 3A
C680	24109333	CERAMIC CHIP CK73B 25V 33000PFK
C681	24668471	ELECTROLYTIC, 35V 470UF M 3A
C682	24668102	ELECTROLYTIC, 35V 1000UF M 3A
C683	24668471	ELECTROLYTIC, 35V 470UF M 3A
C684	24668102	ELECTROLYTIC, 35V 1000UF M 3A
C686	24503041	PLASTIC FILM , 63V 0.1UF J
C704	24591822	PLASTIC FILM, 50V 8200PF J
C705	24232103	CERAMIC DISC, 50V F 0.01UF Z
C707	24794470	ELECTORLYTIC, 16V 47UF M
C712	24666470	ELECTORLYTIC, 16V 47UF M 3A
C713	24709100	ELECTROLYTIC, 200V 10UF M
C714	24436101	CERAMIC DISC, 50V SL 100PF J
C715	24214472	CERAMIC DISC, 500V B 4700PF K
C716	24436101	CERAMIC DISC, 50V SL 100PF J
C717	24214472	CERAMIC DISC, 500V B 4700PF K
C718	24766470	ELECTROLYTIC, 50V 47UF M
C719	24435560	CERAMIC DISC, 500V SL 56PF J
C720	24709100	ELECTROLYTIC, 200V 10UF M
C721	24797470	ELECTROLYTIC, 50V 47UF M
C726	24212102	CERAMIC DISC, 50V B 1000PF K
⚠ C801	24503002	PLASTIC FILM, AC275V 0.22UF M
⚠ C802	24503001	PLASTIC FILM, AC275V 0.1UF M
C805	24092623	CERAMIC DISC, 250V F 0.01UF Z
C806	24092623	CERAMIC DISC, 250V F 0.01UF Z
C807	24214103	CERAMIC DISC, 500V B 0.01UF K
C808	24214103	CERAMIC DISC, 500V B 0.01UF K
C810	24086062	ELECTROLYTIC, 200V 1000UF M 3F
C810A	23960136	ADHESIVE, SILICONE, TSE3843-W
⚠ C811	24092583	CERAMIC DISC, AC250V E 2200PF M

Location No.	Parts No.	Description
⚠ C812	24092583	CERAMIC DISC, AC250V E 2200PF M
⚠ C815	24092591	CERAMIC DISC, AC250V B 470PF K
C817	24590102	PLASTIC FILM, 50V 1000PF J
C818	24539104	PLASTIC FILM, 50V 0.1UF J
C821	24794102	ELECTROLYTIC, 16V 1000UF M
C828	24503047	PLASTIC FILM, 63V 0.33UF J
C829	24794101	ELECTROLYTIC, 16V 100UF M
C830	24503047	PLASTIC FILM, 63V 0.33UF J
C831	24795470	ELECTROLYTIC, 25V 47UF M
C832	24794101	ELECTROLYTIC, 16V 100UF M
C833	24794101	ELECTROLYTIC, 16V 100UF M
C833	24503041	PLASTIC FILM , 63V 0.1UF J
C834	24503041	PLASTIC FILM , 63V 0.1UF J
C835	24214331	CERAMIC DISC, 500V B 330PF K
C835	24795470	ELECTROLYTIC, 25V 47UF M
C837	24503041	PLASTIC FILM , 63V 0.1UF J
C838	24617040	ELECTROLYTIC, 25V 1000UF M 3D
C839	24503047	PLASTIC FILM, 63V 0.33UF J
C840	24679220	ELECTROLYTIC, 250V 22UF M 3A
C841	24073043	ELECTROLYTIC, 16V 2200UF M 3A
C842	24503041	PLASTIC FILM , 63V 0.1UF J
C843	24092469	CERAMIC DISC, 2KV B 100PF K
C844	24793221	ELECTROLYTIC, 10V 220UF M
C845	24073082	ELECTROLYTIC, 50V 2.2UF M 3A
C847	24795470	ELECTROLYTIC, 25V 47UF M
C848	24796222	ELECTROLYTIC, 35V 2200UF M
C849	24794222	ELECTROLYTIC, 16V 2200UF M
C860	24214103	CERAMIC DISC, 500V B 0.01UF K
C862	24435221	CERAMIC DISC, 500V SL 220PF J
C863	24503041	PLASTIC FILM , 63V 0.1UF J
C864	24092347	CERAMIC DISC, 2KV R 1500PF K
C865	24092347	CERAMIC DISC, 2KV R 1500PF K
C866	24669010	ELECTROLYTIC, 50V 1UF M 3A
C867	24591682	PLASTIC FILM, 50V 6800PF J
C868	24668470	ELECTROLYTIC, 35V 47UF M 3A
C869	24678229	ELECTROLYTIC, 200V 2.2UF M 3A
C870	24503208	PLASTIC FILM, 400V 0.24UF J
C871	24092347	CERAMIC DISC, 2KV R 1500PF K
C873	24503045	PLASTIC FILM, 63V 0.22UF J
C874	24435221	CERAMIC DISC, 500V SL 220PF J
C876	24503041	PLASTIC FILM , 63V 0.1UF J
C877	24092347	CERAMIC DISC, 2KV R 1500PF K
C879	24212101	CERAMIC DISC, 50V B 100PF K
C881	24214471	CERAMIC DISC, 500V B 470PF K
C882	24214471	CERAMIC DISC, 500V B 470PF K
C884	24640019	ELECTROLYTIC, 160V 220UF M H-R
C885	24214471	CERAMIC DISC, 500V B 470PF K
C886	24214471	CERAMIC DISC, 500V B 470PF K
C889	24796332	ELECTROLYTIC, 35V 3300UF M
C891	24082227	PLASTIC FILM, 250V 0.068UF K
C893	24092333	CERAMIC DISC, 2KV 100PF K
C894	24092333	CERAMIC DISC, 2KV 100PF K
C895	24794222	ELECTROLYTIC, 16V 2200UF M
C896	24214471	CERAMIC DISC, 500V B 470PF K
C897	24796102	ELECTROLYTIC, 35V 1000UF M
C898	24503047	PLASTIC FILM, 63V 0.33UF J
C899	24214471	CERAMIC DISC, 500V B 470PF K
C902	24092353	CERAMIC DISC, 2KV 4700PF K
C904	24436471	CERAMIC DISC, 50V SL 470PF J
C905	24436391	CERAMIC DISC, 50V SL 390PF J
C907	24436561	CERAMIC DISC, 50V SL 560PF J
C909	24679220	ELECTROLYTIC, 250V 22UF M 3A
C910	24669478	ELECTROLYTIC, 50V 0.47UF M 3A
C911	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
C912	24073042	ELECTROLYTIC, 16V 1000UF M 3A

Location No.	Parts No.	Description
C913	24666102	ELECTROLYTIC, 16V 1000UF M 3A
C914	24232103	CERAMIC DISC, 50V F 0.01UF Z
C918	24503041	PLASTIC FILM , 63V 0.1UF J
C919	24503041	PLASTIC FILM , 63V 0.1UF J
C920	24503041	PLASTIC FILM , 63V 0.1UF J
C921	24503041	PLASTIC FILM , 63V 0.1UF J
C922	24436390	CERAMIC DISC, 50V SL 39PFJ
C931	24214101	CERAMIC DISC, 500V B 100PF K
C2020	24109103	CERAMIC CHIP, 50V B 0.01UF K
C2102	24108100	CERAMIC CHIP, 50V SL 10PF D
C2103	24108100	CERAMIC CHIP, 50V SL 10PF D
C2104	24108100	CERAMIC CHIP, 50V SL 10PF D
C2110	24109103	CERAMIC CHIP, 50V B 0.01UF K
C2112	24109103	CERAMIC CHIP, 50V B 0.01UF K
C2113	24092731	CERAMIC CHIP, 16V B 1UF K
C3100	24667102	ELECTROLYTIC, 25V 1000UF M 3A
C3103	24105330	CERAMIC CHIP, 50V CH 33PF J
C3110	24092730	CERAMIC CHIP, 16V B 0.1UF K
C3150	24669229	ELECTROLYTIC, 50V 2.2UF M 3A
C4010	24109331	CERAMIC CHIP, 50V B 330PF K
C4401	24073039	ELECTROLYTIC, 16V 220UF M 3A
C4402	24109103	CERAMIC CHIP, 50V B 0.01UF K
C4403	24766010	ELECTROLYTIC, 50V 1UF M
C4404	24109103	CERAMIC CHIP, 50V B 0.01UF K
C4405	24100104	CERAMIC CHIP, 25V F 0.1UF Z
C4406	24109103	CERAMIC CHIP, 50V B 0.01UF K
C4407	24763221	ELECTROLYTIC, 16V 220UF M
C4410	24109122	CERAMIC CHIP, 50V B 1200PF K
C4420	24109103	CERAMIC CHIP, 50V B 0.01UF K
C4427	24092538	CERAMIC CHIP, 10V F 1UF Z
C4460	24539224	PLASTIC FILM, 50V 0.22UF J
C4461	24539224	PLASTIC FILM, 50V 0.22UF J
C4690	24109103	CERAMIC CHIP, 50V B 0.01UF K
C4691	24109822	CERAMIC CHIP, 50V B 8200PF K
C4693	24591473	PLASTIC FILM, 50V 0.047UF J
C4699	24668222	ELECTROLYTIC, 35V 2200UF M 3A
C4811	24567474	PLASTIC FILM, 50V 0.47UF J
C4816	24669010	ELECTROLYTIC, 50V 1UF M 3A
C4819	24567684	PLASTIC FILM, 50V 0.68UF J
C5020	24109103	CERAMIC CHIP, 50V B 0.01UF K
C5030	24763101	ELECTROLYTIC, 16V 100UF M
C5080	24797010	ELECTROLYTIC, 50V 1UF M
C5090	24763101	ELECTROLYTIC, 16V 100UF M
CA04	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA05	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA06	24109392	CERAMIC CHIP, 50V B 3900PF K
CA07	24109392	CERAMIC CHIP, 50V B 3900PF K
CA09	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA15	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA22	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA23	24105101	CERAMIC CHIP, 50V CH 100PF J
CA25	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CA27	24092538	CERAMIC CHIP, 10V F 1UF Z
CA28	24085970	ELECTROLYTIC, NONPOLAR, 16V 10UF M 7L
CA30	24085970	ELECTROLYTIC, NONPOLAR, 16V 10UF M 7L
CA31	24092538	CERAMIC CHIP, 10V F 1UF Z
CA33	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CA34	24092538	CERAMIC CHIP, 10V F 1UF Z
CA37	24105101	CERAMIC CHIP, 50V CH 100PF J
CA38	24105101	CERAMIC CHIP, 50V CH 100PF J
CA39	24105101	CERAMIC CHIP, 50V CH 100PF J
CA42	24109392	CERAMIC CHIP, 50V B 3900PF K
CA45	24105471	CERAMIC CHIP, 50V CH 470PF J
CA46	24105471	CERAMIC CHIP, 50V CH 470PF J
CA49	24105101	CERAMIC CHIP, 50V CH 100PF J

Location No.	Parts No.	Description
CA52	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA54	24092730	CERAMIC CHIP, 16V B 0.1UF K
CA55	24105101	CERAMIC CHIP, 50V CH 100PF J
CA59	24105101	CERAMIC CHIP, 50V CH 100PF J
CA60	24105101	CERAMIC CHIP, 50V CH 100PF J
CA61	24666220	ELECTROLYTIC, 16V 22UF M 3A
CA68	24666100	ELECTROLYTIC, 10V 10UF M 3A
CA69	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA71	24105331	CERAMIC CHIP, 50V CH 330PF J
CA72	24085970	ELECTROLYTIC, NONPOLAR, 16V 10UF M 7L
CA73	24666100	ELECTROLYTIC, 10V 10UF M 3A
CA80	24503041	PLASTIC FILM , 63V 0.1UF J
CA81	24073015	ELECTROLYTIC, 10V 47UF M 3A
CA82	24503049	PLASTIC FILM, 63V 0.47UF J
CA95	24100103	CERAMIC CHIP, 50V F 0.01UF Z
CA251	24073015	ELECTROLYTIC, 10V 47UF M 3A
CA331	24073015	ELECTROLYTIC, 10V 47UF M 3A
CA371	24105820	CERAMIC CHIP, 50V CH 82PF J
CA381	24105820	CERAMIC CHIP, 50V CH 82PF J
CA391	24105820	CERAMIC CHIP, 50V CH 82PF J
CA611	24109103	CERAMIC CHIP, 50V B 0.01UF K
CA701	24092538	CERAMIC CHIP, 10V F 1UF Z
CA705	24666100	ELECTROLYTIC, 10V 10UF M 3A
CB01	24794470	ELECTORLYTIC, 16V 47UF M
CB05	24666100	ELECTROLYTIC, 10V 10UF M 3A
CB13	24085970	ELECTROLYTIC, NONPOLAR, 16V 10UF M 7L
CB14	24105331	CERAMIC CHIP, 50V CH 330PF J
CB15	24794100	ELECTROLYTIC, 16V 10UF M
CB40	24092538	CERAMIC CHIP, 10V F 1UF Z
CB41	24109222	CERAMIC CHIP, 50V B 2200PF K
CB42	24105561	CERAMIC CHIP, 50V CH 560PF J
CB43	24109332	CERAMIC CHIP, 50V B 3300PF K
CB62	24105331	CERAMIC CHIP, 50V CH 330PF J
CB90	24109103	CERAMIC CHIP, 50V B 0.01UF K
CB91	24666100	ELECTROLYTIC, 10V 10UF M 3A
CC01	24109102	CERAMIC CHIP, 50V B 1000PF K
CC02	24109102	CERAMIC CHIP, 50V B 1000PF K
CC03	24109102	CERAMIC CHIP, 50V B 1000PF K
CC04	24109102	CERAMIC CHIP, 50V B 1000PF K
CC05	24109102	CERAMIC CHIP, 50V B 1000PF K
CC06	24109102	CERAMIC CHIP, 50V B 1000PF K
CC07	24109102	CERAMIC CHIP, 50V B 1000PF K
CC08	24109102	CERAMIC CHIP, 50V B 1000PF K
CC11	24109102	CERAMIC CHIP, 50V B 1000PF K
CC12	24109102	CERAMIC CHIP, 50V B 1000PF K
CC15	24109102	CERAMIC CHIP, 50V B 1000PF K
CC16	24109102	CERAMIC CHIP, 50V B 1000PF K
CI01	24109103	CERAMIC CHIP, 50V B 0.01UF K
CI02	24109103	CERAMIC CHIP, 50V B 0.01UF K
CI03	24109103	CERAMIC CHIP, 50V B 0.01UF K
CI04	24109103	CERAMIC CHIP, 50V B 0.01UF K
CI05	24109103	CERAMIC CHIP, 50V B 0.01UF K
CI07	24109103	CERAMIC CHIP, 50V B 0.01UF K
CI08	24797010	ELECTROLYTIC, 50V 1UF M
CI09	24105470	CERAMIC CHIP, 50V CH 47PF J
CI10	24105180	CERAMIC CHIP, 50V CH 18PF J
CI11	24105270	CERAMIC CHIP, 50V CH 27PF J
CI12	24797478	ELECTROLYTIC, 50V 0.47UF M
CI13	24109102	CERAMIC CHIP, 50V B 1000PF K
CI14	24105470	CERAMIC CHIP, 50V CH 47PF J
CI15	24105390	CERAMIC CHIP, 50V CH 39PF J
CI16	24109103	CERAMIC CHIP, 50V B 0.01UF K
CI17	24092726	CERAMIC CHIP CK733B 16V 2,200,000PFK
CI18	24105181	CERAMIC CHIP, 50V CH 180PF J
CI21	24109103	CERAMIC CHIP, 50V B 0.01UF K

Location No.	Parts No.	Description
CI23	24109103	CERAMIC CHIP, 50V B 0.01UF K
CI25	24105240	CERAMIC CHIP, 50V CH 24PF J
CI51	24797220	ELECTROLYTIC, 50V 22UF M
CI52	24794101	ELECTROLYTIC, 16V 100UF M
CI53	24797339	ELECTROLYTIO, 50V 3.3UF M
CJ01	24567104	PLASTIC FILM, 50V 0.1UF J
CJ02	24666470	ELECTORLYTIC, 16V 47UF M 3A
CJ03	24567104	PLASTIC FILM, 50V 0.1UF J
CJ04	24666470	ELECTORLYTIC, 16V 47UF M 3A
CJ05	24794101	ELECTROLYTIC, 16V 100UF M
CS01	24797229	ELECTROLYTIC, 50V 2.2UF M
CS02	24797229	ELECTROLYTIC, 50V 2.2UF M
CS03	24797229	ELECTROLYTIC, 50V 2.2UF M
CS04	24797229	ELECTROLYTIC, 50V 2.2UF M
CS05	24797229	ELECTROLYTIC, 50V 2.2UF M
CS06	24797229	ELECTROLYTIC, 50V 2.2UF M
CS07	24797229	ELECTROLYTIC, 50V 2.2UF M
CS08	24797229	ELECTROLYTIC, 50V 2.2UF M
CS09	24797229	ELECTROLYTIC, 50V 2.2UF M
CS10	24797229	ELECTROLYTIC, 50V 2.2UF M
CS11	24797229	ELECTROLYTIC, 50V 2.2UF M
CS12	24797229	ELECTROLYTIC, 50V 2.2UF M
CS13	24794100	ELECTROLYTIC, 16V 10UF M
CS14	24794100	ELECTROLYTIC, 16V 10UF M
CS15	24797229	ELECTROLYTIC, 50V 2.2UF M
CS16	24797229	ELECTROLYTIC, 50V 2.2UF M
CS19	24797479	ELECTROLYTIC, 50V 4.7UF M
CS20	24797478	ELECTROLYTIC, 50V 0.47UF M
CS21	24797479	ELECTROLYTIC, 50V 4.7UF M
CS22	24797479	ELECTROLYTIC, 50V 4.7UF M
CS24	24797229	ELECTROLYTIC, 50V 2.2UF M
CS25	24794470	ELECTORLYTIC, 16V 47UF M
CS26	24085944	ELECTROLYTIC, NONPOLAR, 50V 2.2UF M 11L
CS27	24085944	ELECTROLYTIC, NONPOLAR, 50V 2.2UF M 11L
CS30	24797229	ELECTROLYTIC, 50V 2.2UF M
CS31	24797229	ELECTROLYTIC, 50V 2.2UF M
CS115	24797010	ELECTROLYTIC, 50V 1UF M
CS116	24797010	ELECTROLYTIC, 50V 1UF M
CS119	24797010	ELECTROLYTIC, 50V 1UF M
CS120	24109103	CERAMIC CHIP, 50V B 0.01UF K
CS121	24797010	ELECTROLYTIC, 50V 1UF M
CS122	24797101	ELECTROLYTIC, 50V 100UF M
CS123	24073089	ELECTROLYTIC, 50V 47UF M 3A
CS124	24797229	ELECTROLYTIC, 50V 2.2UF M
CS125	24590102	PLASTIC FILM, 50V 1000PF J
CV01	24092621	CERAMIC CHIP, 10V B 1UF K
CV02	24092621	CERAMIC CHIP, 10V B 1UF K
CV03	24092621	CERAMIC CHIP, 10V B 1UF K
CV04	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV05	24092621	CERAMIC CHIP, 10V B 1UF K
CV06	24092621	CERAMIC CHIP, 10V B 1UF K
CV07	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV08	24794101	ELECTROLYTIC, 16V 100UF M
CV09	24092621	CERAMIC CHIP, 10V B 1UF K
CV10	24794100	ELECTROLYTIC, 16V 10UF M
CV11	24092621	CERAMIC CHIP, 10V B 1UF K
CV12	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV13	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV14	24092621	CERAMIC CHIP, 10V B 1UF K
CV15	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV23	24794101	ELECTROLYTIC, 16V 100UF M
CV24	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV38	24109102	CERAMIC CHIP, 50V B 1000PF K

Location No.	Parts No.	Description
CV39	24109102	CERAMIC CHIP, 50V B 1000PF K
CV40	24794101	ELECTROLYTIC, 16V 100UF M
CV42	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV45	24092621	CERAMIC CHIP, 10V B 1UF K
CV46	24092621	CERAMIC CHIP, 10V B 1UF K
CV47	24092621	CERAMIC CHIP, 10V B 1UF K
CV64	24794471	ELECTROLYTIC, 16V 470UF M
CV65	24794101	ELECTROLYTIC, 16V 100UF M
CV66	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV67	24794100	ELECTROLYTIC, 16V 10UF M
CV68	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CV100	24794100	ELECTROLYTIC, 16V 10UF M
CV101	24232103	CERAMIC DISC, 50V F 0.01UF Z
CV102	24232103	CERAMIC DISC, 50V F 0.01UF Z
CV238	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV244	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV245	24092441	CERAMIC CHIP, 16V F 1UF Z
CV246	24092441	CERAMIC CHIP, 16V F 1UF Z
CV247	24092441	CERAMIC CHIP, 16V F 1UF Z
CV248	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV249	24092441	CERAMIC CHIP, 16V F 1UF Z
CV250	24092441	CERAMIC CHIP, 16V F 1UF Z
CV251	24092441	CERAMIC CHIP, 16V F 1UF Z
CV252	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV253	24092441	CERAMIC CHIP, 16V F 1UF Z
CV254	24092441	CERAMIC CHIP, 16V F 1UF Z
CV255	24092441	CERAMIC CHIP, 16V F 1UF Z
CV256	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV257	24203100	ELECTORLYTIC, 16V 10UF M 7L 3A
CV258	24666471	ELECTROLYTIC, 16V 470UF M 3A
CV259	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV261	24109103	CERAMIC CHIP, 50V B 0.01UF K
CV263	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY101	24092441	CERAMIC CHIP, 16V F 1UF Z
CY102	24794101	ELECTROLYTIC, 16V 100UF M
CY103	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CY104	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY105	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY106	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY107	24794100	ELECTROLYTIC, 16V 10UF M
CY108	24100104	CERAMIC CHIP, 25V F 0.1UF Z
CY109	24105101	CERAMIC CHIP, 50V CH 100PF J
CY111	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY112	24105181	CERAMIC CHIP, 50V CH 180PF J
CY113	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY114	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY115	24105390	CERAMIC CHIP, 50V CH 39PF J
CY116	24105470	CERAMIC CHIP, 50V CH 47PF J
CY117	24105180	CERAMIC CHIP, 50V CH 18PF J
CY501	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY502	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY504	24109222	CERAMIC CHIP, 50V B 2200PF K
CY505	24105120	CERAMIC CHIP, 50V CH 12PF J
CY506	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY508	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY512	24092463	CERAMIC CHIP, 16V B 0.22UF K
CY513	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY514	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY515	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY516	24109103	CERAMIC CHIP, 50V B 0.01UF K
CY517	24092731	CERAMIC CHIP, 16V B 1UF K
CY524	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY525	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY526	24092730	CERAMIC CHIP, 16V B 0.1UF K
CY538	24794222	ELECTROLYTIC, 16V 2200UF M

Location No.	Parts No.	Description
CY539	24794470	ELECTORLYTIC, 16V 47UF M
CY582	24105101	CERAMIC CHIP, 50V CH 100PF J
RESISTORS		
R101	24553223	OXIDE METAL FILM, 1W 22K OHM J
R150	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R151	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
R152	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R173	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R174	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
R217	24366103	CARBON FILM, 1/6W 10K OHM J
R218	24366333	CARBON FILM, 1/6W 33K OHM J
R227	24366273	CARBON FILM, 1/6W 27K OHM J
R228	24366562	CARBON FILM, 1/6W 5.6K OHM J
R232	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R245	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R264	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
R265	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
R266	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
R286	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
R287	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
R288	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
R303	24321109	OXIDE METAL FILM, 1/2W 1 OHM J
R305	24322918	OXIDE METAL FILM, 1W 0.91 OHM J
R309	24383271	OXIDE METAL FILM, 2W 270 OHM J
R315	24011274	CHIP, METAL FILM, 1/20W 270K OHM J
R316	24011823	CHIP, METAL FILM, 1/20W 82K OHM J
R318	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R319	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R320	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R321	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
R322	24011274	CHIP, METAL FILM, 1/20W 270K OHM J
R324	24011394	CHIP, METAL FILM, 1/20W 390K OHM J
R326	24366102	CARBON FILM, 1/6W 1K OHM J
⚠ R327	24338159	OXIDE METAL FILM, 1W 1.5 OHM J
⚠ R328	24338159	OXIDE METAL FILM, 1W 1.5 OHM J
R329	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R331	24872823	CHIP, METAL FILM, 1/16W 82K OHM J
R332	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R333	24552103	OXIDE METAL FILM, 1/2W 10K OHM J
R334	24552103	OXIDE METAL FILM, 1/2W 10K OHM J
R336	24000824	CHIP JUMPER, 2125TYPE
R360	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R361	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R362	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R363	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R365	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
R366	24011911	CHIP, METAL FILM, 1/20W 910 OHM J
R367	24011242	CHIP, METAL FILM, 1/20W 2.4K OHM J
R370	24872103	CHIP, METAL FILM, 1/16W 10K OHM J
R371	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R372	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R373	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R374	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R376	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R377	24366220	CARBON FILM, 1/6W 22 OHM J
R401	24011361	CHIP, METAL FILM, 1/20W 360 OHM J
R402	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R403	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
R405	24553682	OXIDE METAL FILM, 1W 6.8K OHM J
R409	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R411	24366101	CARBON FILM, 1/6W 100 OHM J
R412	24323228	OXIDE METAL FILM, 2W 0.22 OHM J
R413	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
R415	24383271	OXIDE METAL FILM, 2W 270 OHM J

Location No.	Parts No.	Description
R416	24383680	OXIDE METAL FILM, 2W 68 OHM J
R422	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R423	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R424	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
R425	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R426	24366222	CARBON FILM, 1/6W 2.2K OHM J
R429	24553100	OXIDE METAL FILM, 1W 10 OHM J
R431	24546159	FUSIBLE, 1/2W 1.5 OHM J
R432	24552151	OXIDE METAL FILM, 1/2W 150 OHM J
R435	24327224	METAL FILM, 1/4W 220K OHM F
R441	24383331	OXIDE METAL FILM, 2W 330 OHM J
⚠ R448	24321338	OXIDE METAL FILM, 1/2W 0.33 OHM J
R460	24366103	CARBON FILM, 1/6W 10K OHM J
R461	24366102	CARBON FILM, 1/6W 1K OHM J
R462	24366562	CARBON FILM, 1/6W 5.6K OHM J
R463	24366473	CARBON FILM, 1/6W 47K OHM J
R464	24366221	CARBON FILM, 1/6W 220 OHM J
⚠ R465	24011271	CHIP, METAL FILM, 1/20W 270 OHM J
R466	24383220	OXIDE METAL FILM, 2W 22 OHM J
R467	24383220	OXIDE METAL FILM, 2W 22 OHM J
⚠ R468	24000634	METAL FILM, 1/4W 11K OHM F
R469	24366823	CARBON FILM, 1/6W 82K OHM J
⚠ R470	24339518	OXIDE METAL FILM, 2W 0.51 OHM J
R471	24381271	OXIDE METAL FILM, 1/2W 270 OHM J
R472	24381270	OXIDE METAL FILM, 1/2W 27 OHM J
R473	24000247	METAL FILM, 1/4W 39K OHM F
R474	24872472	CHIP, METAL FILM, 1/16W 4.7K OHM J
R475	24872912	CHIP, METAL FILM, 1/16W 9.1K OHM J
R476	24000221	METAL FILM, 1/4W 20K OHM F
R477	24366102	CARBON FILM, 1/6W 1K OHM J
⚠ R478	24338109	OXIDE METAL FILM, 1W 1 OHM J
R479	24381131	OXIDE METAL FILM, 1/2W 130 OHM J
R481	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R482	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
R483	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R486	24011622	CHIP, METAL FILM, 1/20W 6.2K OHM J
R487	24011474	CHIP, METAL FILM, 1/20W 470K OHM J
R488	24011154	CHIP, METAL FILM, 1/20W 150K OHM J
R489	24011563	CHIP, METAL FILM, 1/20W 56K OHM J
R494	24366184	CARBON FILM, 1/6W 18OK OHM J
R502	24000445	CHIP JUMPER, 1608TYPE
R513	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R514	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R515	24871103	CHIP, METAL FILM, 1/8W 10K OHM J
R520	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R521	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R526	24000445	CHIP JUMPER, 1608TYPE
R547	24011680	CHIP, METAL FILM, 1/20W 68 OHM J
R548	24011680	CHIP, METAL FILM, 1/20W 68 OHM J
R553	24011680	CHIP, METAL FILM, 1/20W 68 OHM J
R560	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R561	24552181	OXIDE METAL FILM, 1/2W 180 OHM J
R562	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R563	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R564	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R565	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R566	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R567	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R568	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R569	24011224	CHIP, METAL FILM, 1/20W 220K OHM J
R570	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R610	24871222	CHIP, METAL FILM, 1/8W 2.2K OHM J
R611	24871222	CHIP, METAL FILM, 1/8W 2.2K OHM J
R612	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R613	24871222	CHIP, METAL FILM, 1/8W 2.2K OHM J

Location No.	Parts No.	Description
R614	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R615	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
R616	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
R617	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R660	24872102	CHIP, METAL FILM, 1/16W 1K OHM J
R661	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R662	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R663	24011122	CHIP, METAL FILM, 1/20W 1.2K OHM J
R664	24011122	CHIP, METAL FILM, 1/20W 1.2K OHM J
R666	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R667	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R668	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R669	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R676	24366229	CARBON FILM, 1/6W 2.2 OHM J
R677	24366229	CARBON FILM, 1/6W 2.2 OHM J
R680	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R681	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R682	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
R683	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
R686	24366229	CARBON FILM, 1/6W 2.2 OHM J
R693	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R698	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R699	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R702	24552221	OXIDE METAL FILM, 1/2W 220 OHM J
R709	24366563	CARBON FILM, 1/6W 56K OHM J
R713	24366393	CARBON FILM, 1/6W 39K OHM J
R715	24366273	CARBON FILM, 1/6W 27K OHM J
R716	24366273	CARBON FILM, 1/6W 27K OHM J
R717	24366333	CARBON FILM, 1/6W 33K OHM J
R718	24366222	CARBON FILM, 1/6W 2.2K OHM J
R719	24366101	CARBON FILM, 1/6W 100 OHM J
R720	24366102	CARBON FILM, 1/6W 1K OHM J
R721	24366101	CARBON FILM, 1/6W 100 OHM J
R722	24552471	OXIDE METAL FILM, 1/2W 470 OHM J
R723	24366101	CARBON FILM, 1/6W 100 OHM J
R724	24366151	CARBON FILM, 1/6W 150 OHM J
R725	24366182	CARBON FILM, 1/6W 1.8K OHM J
R730	24552100	OXIDE METAL FILM, 1/2W 10 OHM J
R731	24552331	OXIDE METAL FILM, 1/2W 330 OHM J
R732	24366330	CARBON FILM, 1/6W 33 OHM J
R733	24366683	CARBON FILM, 1/6W 68K OHM J
R734	24366330	CARBON FILM, 1/6W 33 OHM J
R735	24366683	CARBON FILM, 1/6W 68K OHM J
R736	24553470	OXIDE METAL FILM, 1W 47 OHM J
R737	24366681	CARBON FILM, 1/6W 680 OHM J
R738	24366102	CARBON FILM, 1/6W 1K OHM J
R739	24366681	CARBON FILM, 1/6W 680 OHM J
R740	24553470	OXIDE METAL FILM, 1W 47 OHM J
R741	24322229	OXIDE METAL FILM, 1W 2.2 OHM J
R742	24322229	OXIDE METAL FILM, 1W 2.2 OHM J
R743	24554181	OXIDE METAL FILM, 2W 180 OHM J
R744	24366122	CARBON FILM, 1/6W 1.2K OHM J
R745	24366122	CARBON FILM, 1/6W 1.2K OHM J
⚠ R808	24019493	THERMISTOR, PTC, AC140V 1.5 OHM M
⚠ R810	24045007	CEMENT, 20W 1.2 J
R818	24366102	CARBON FILM, 1/6W 1K OHM J
R819	24366103	CARBON FILM, 1/6W 10K OHM J
R832	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
R834	24366102	CARBON FILM, 1/6W 1K OHM J
R835	24366820	CARBON FILM, 1/6W 82 OHM J
R836	24011151	CHIP, METAL FILM, 1/20W 150 OHM J
R837	24011220	CHIP, METAL FILM, 1/20W 22 OHM J
R838	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
R840	24552562	OXIDE METAL FILM, 1/2W 5.6K OHM J
R841	24366102	CARBON FILM, 1/6W 1K OHM J

Location No.	Parts No.	Description
R842	24376563	CARB0N FILM, 1/2W 56K OHM J
R843	24376563	CARB0N FILM, 1/2W 56K OHM J
R844	24366103	CARBON FILM, 1/6W 10K OHM J
R844	24323568	OXIDE METAL FILM, 2W 0.56 OHM J
R845	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
R846	24011560	CHIP, METAL FILM, 1/20W 56 OHM J
R847	24000445	CHIP JUMPER, 1608TYPE
R848	24011680	CHIP, METAL FILM, 1/20W 68 OHM J
R849	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
R850	24366222	CARBON FILM, 1/6W 2.2K OHM J
R851	24366473	CARBON FILM, 1/6W 47K OHM J
R861	24382153	OXIDE METAL FILM, 1W 15K OHM J
R862	24552330	OXIDE METAL FILM, 1/2W 33 OHM J
R864	24552102	OXIDE METAL FILM, 1/2W 1K OHM J
R865	24552121	OXIDE METAL FILM, 1/2W 120 OHM J
R867	24366223	CARBON FILM, 1/6W 22K OHM J
R868	24552560	OXIDE METAL FILM, 1/2W 56 OHM J
R870	24381221	OXIDE METAL FILM, 1/2W 220 OHM J
R871	24553470	OXIDE METAL FILM, 1W 47 OHM J
R872	24382563	OXIDE METAL FILM, 1W 56K OHM J
R883	24553393	OXIDE METAL FILM, 1W 39K OHM J
R884	24366102	CARBON FILM, 1/6W 1K OHM J
R891	24366152	CARBON FILM, 1/6W 1.5K OHM J
⚠ R899	24010001	CARBON FILM, 1/2W 3.9M OHM J
R901	24946561	CARBON COMPOSITION, 1/2W 560 OHM K
R902	24946561	CARBON COMPOSITION, 1/2W 560 OHM K
R903	24946561	CARBON COMPOSITION, 1/2W 560 OHM K
R904	24366472	CARBON FILM, 1/6W 4.7K OHM J
R905	24366150	CARBON FILM, 1/6W 15 OHM J
R912	24366102	CARBON FILM, 1/6W 1K OHM J
R914	24366151	CARBON FILM, 1/6W 150 OHM J
R915	24366470	CARBON FILM, 1/6W 47 OHM J
R916	24366180	CARBON FILM, 1/6W 18 OHM J
R917	24366431	CARBON FILM, 1/6W 430 OHM J
R918	24366240	CARBON FILM, 1/6W 24 OHM J
R919	24366102	CARBON FILM, 1/6W 1K OHM J
R920	24000883	FUSIBLE, 1W 3.6 OHM J
R921	24366151	CARBON FILM, 1/6W 150 OHM J
R922	24366470	CARBON FILM, 1/6W 47 OHM J
R924	24366220	CARBON FILM, 1/6W 22 OHM J
R925	24366431	CARBON FILM, 1/6W 430 OHM J
R926	24366102	CARBON FILM, 1/6W 1K OHM J
R928	24366151	CARBON FILM, 1/6W 150 OHM J
R929	24366470	CARBON FILM, 1/6W 47 OHM J
R930	24366180	CARBON FILM, 1/6W 18 OHM J
R932	24366332	CARBON FILM, 1/6W 3.3K OHM J
R933	24366750	CARBON FILM, 1/6W 75 OHM J
R934	24366391	CARBON FILM, 1/6W 390 OHM J
R935	24366122	CARBON FILM, 1/6W 1.2K OHM J
R936	24366750	CARBON FILM, 1/6W 75 OHM J
R937	24366431	CARBON FILM, 1/6W 430 OHM J
R939	24366100	CARBON FILM, 1/6W 10 OHM J
R942	24366392	CARBON FILM, 1/6W 3.9K OHM J
R943	24366392	CARBON FILM, 1/6W 3.9K OHM J
R944	24366392	CARBON FILM, 1/6W 3.9K OHM J
R945	24366180	CARBON FILM, 1/6W 18 OHM J
R946	24366180	CARBON FILM, 1/6W 18 OHM J
R950	24060356	VARIABLE, METAL 16B 0.6W 20M OHM M
R952	24366622	CARBON FILM, 1/6W 6.2K OHM J
R953	24366622	CARBON FILM, 1/6W 6.2K OHM J
R954	24366622	CARBON FILM, 1/6W 6.2K OHM J
R960	24383153	OXIDE METAL FILM, 2W 15K OHM J
R961	24383153	OXIDE METAL FILM, 2W 15K OHM J
R962	24383153	OXIDE METAL FILM, 2W 15K OHM J
R963	24383153	OXIDE METAL FILM, 2W 15K OHM J

Location No.	Parts No.	Description
R964	24383153	OXIDE METAL FILM, 2W 15K OHM J
R965	24383153	OXIDE METAL FILM, 2W 15K OHM J
R977	24366561	CARBON FILM, 1/6W 560 OHM J
R978	24383153	OXIDE METAL FILM, 2W 15K OHM J
R979	24383153	OXIDE METAL FILM, 2W 15K OHM J
R980	24366471	CARBON FILM, 1/6W 470 OHM J
R981	24366471	CARBON FILM, 1/6W 470 OHM J
R982	24366682	CARBON FILM, 1/6W 6.8K OHM J
R983	24366222	CARBON FILM, 1/6W 2.2K OHM J
R984	24367821	CARBON FILM, 1/6W 820 OHM G
R985	24367471	CARBON FILM, 1/6W 470 OHM G
R986	24367681	CARBON FILM, 1/6W 680 OHM G
R987	24367681	CARBON FILM, 1/6W 680 OHM G
R988	24367472	CARBON FILM, 1/6W 4.7K OHM G
R989	24367472	CARBON FILM, 1/6W 4.7K OHM G
R990	24366561	CARBON FILM, 1/6W 560 OHM J
R991	24367391	CARBON FILM, 1/6W 390 OHM G
R992	24366150	CARBON FILM, 1/6W 15 OHM J
R993	24383153	OXIDE METAL FILM, 2W 15K OHM J
R994	24383153	OXIDE METAL FILM, 2W 15K OHM J
R995	24383153	OXIDE METAL FILM, 2W 15K OHM J
R996	24383153	OXIDE METAL FILM, 2W 15K OHM J
R2020	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R2040	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R2060	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R2104	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R2105	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R2106	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R2107	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R2108	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R2109	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R2110	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R2111	24011470	CHIP, METAL FILM, 1/20W 47 OHM J
R2112	24011470	CHIP, METAL FILM, 1/20W 47 OHM J
R2113	24011470	CHIP, METAL FILM, 1/20W 47 OHM J
R2149	24871102	CHIP, METAL FILM, 1/8W 1K OHM J
R2150	24871102	CHIP, METAL FILM, 1/8W 1K OHM J
R2151	24871102	CHIP, METAL FILM, 1/8W 1K OHM J
R2152	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R2153	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R2154	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R2155	24871102	CHIP, METAL FILM, 1/8W 1K OHM J
R2156	24871102	CHIP, METAL FILM, 1/8W 1K OHM J
R2157	24871102	CHIP, METAL FILM, 1/8W 1K OHM J
R2158	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R2159	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R2160	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R2161	24871472	CHIP, METAL FILM, 1/8W 4.7K OHM J
R2162	24871562	CHIP, METAL FILM, 1/8W 5.6K OHM J
R2163	24011121	CHIP, METAL FILM, 1/20W 120 OHM J
R2164	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
R2165	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
R2166	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
R2167	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
R2168	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
R2201	24366563	CARBON FILM, 1/6W 56K OHM J
R2202	24366563	CARBON FILM, 1/6W 56K OHM J
R3105	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R3106	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R3140	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R3150	24011474	CHIP, METAL FILM, 1/20W 470K OHM J
R3502	24000445	CHIP JUMPER, 1608TYPE
R3920	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4111	24019259	FUSIBLE, 1/4W 27 OHM G
R4310	24011183	CHIP, METAL FILM, 1/20W 18K OHM J

Location No.	Parts No.	Description
R4401	24011302	CHIP, METAL FILM, 1/20W 3K OHM J
R4403	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
R4405	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R4406	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4410	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4413	24011561	CHIP, METAL FILM, 1/20W 560 OHM J
R4422	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4425	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
R4461	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R4471	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R4472	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
R4500	24321229	OXIDE METAL FILM, 1/2W 2.2 OHM J
R4501	24383820	OXIDE FILM, 2W 82. J
R4504	24383820	OXIDE FILM, 2W 82. J
R4560	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
R4562	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R4563	24011682	CHIP, METAL FILM, 1/20W 6.8K OHM J
R4620	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
R4630	24872183	CHIP, METAL FILM, 1/16W 18K OHM J
⚠ R4670	24000524	METAL FILM, 1/4W 4.3K F
R4690	24872103	CHIP, METAL FILM, 1/16W 10K OHM J
R4691	24872242	CHIP, METAL FILM, 1/16W 2.4K OHM J
R4692	24872471	CHIP, METAL FILM, 1/16W 470 OHM J
R4693	24552331	OXIDE METAL FILM, 1/2W 330 OHM J
R4700	24011274	CHIP, METAL FILM, 1/20W 270K OHM J
R4701	24011474	CHIP, METAL FILM, 1/20W 470K OHM J
R4702	24011271	CHIP, METAL FILM, 1/20W 270 OHM J
R4703	24011823	CHIP, METAL FILM, 1/20W 82K OHM J
R4714	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R4715	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R4716	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
R4717	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
R4799	24872103	CHIP, METAL FILM, 1/16W 10K OHM J
R4816	24366471	CARBON FILM, 1/6W 470 OHM J
R4817	24366101	CARBON FILM, 1/6W 100 OHM J
R4818	24366331	CARBON FILM, 1/6W 330 OHM J
R4819	24366102	CARBON FILM, 1/6W 1K OHM J
R4820	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
R5020	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
R5030	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA01	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA02	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA03	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA04	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA05	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA06	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA07	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA09	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA10	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA12	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA13	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA15	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA16	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA17	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA22	24011682	CHIP, METAL FILM, 1/20W 6.8K OHM J
RA23	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA26	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
RA28	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA30	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA32	24011682	CHIP, METAL FILM, 1/20W 6.8K OHM J
RA33	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA35	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RA36	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RA37	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA38	24011101	CHIP, METAL FILM, 1/20W 100 OHM J

Location No.	Parts No.	Description
RA39	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA40	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA41	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RA42	24011151	CHIP, METAL FILM, 1/20W 150 OHM J
RA43	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA44	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA45	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA46	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA47	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA49	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA51	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA52	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA53	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA54	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RA55	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA59	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA60	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA71	24366273	CARBON FILM, 1/6W 27K OHM J
RA72	24366153	CARBON FILM, 1/6W 15K OHM J
RA72	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RA73	24366822	CARBON FILM, 1/6W 8.2K OHM J
RA73	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RA74	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RA75	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RA76	24366822	CARBON FILM, 1/6W 8.2K OHM J
RA76	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA77	24366153	CARBON FILM, 1/6W 15K OHM J
RA77	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA78	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
RA79	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
RA80	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA81	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RA021	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA031	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RA161	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA221	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RA361	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA374	24000445	CHIP JUMPER, 1608TYPE
RA384	24000445	CHIP JUMPER, 1608TYPE
RA394	24000445	CHIP JUMPER, 1608TYPE
RA401	24011561	CHIP, METAL FILM, 1/20W 560 OHM J
RA431	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA703	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RA705	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RA708	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RB03	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RB05	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RB11	24366271	CARBON FILM, 1/6W 270 OHM J
RB12	24366103	CARBON FILM, 1/6W 10K OHM J
RB13	24366470	CARBON FILM, 1/6W 47 OHM J
RB14	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RB15	24011153	CHIP, METAL FILM, 1/2OW 15K OHM J
RB16	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RB17	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RB30	24366103	CARBON FILM, 1/6W 10K OHM J
RB37	24011331	CHIP, METAL FILM, 1/20W 330 OHM J
RB38	24011105	CHIP, METAL FILM, 1/20W 1M OHM J
RB39	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB40	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RB41	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RB42	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RB61	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RB62	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RB64	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RB65	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J

Location No.	Parts No.	Description
RB81	24011122	CHIP, METAL FILM, 1/20W 1.2K OHM J
RB82	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB83	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RB84	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RB90	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RB91	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RB92	24011271	CHIP, METAL FILM, 1/20W 270 OHM J
RB93	24011271	CHIP, METAL FILM, 1/20W 270 OHM J
RB94	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RB95	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RB96	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
RB97	24011273	CHIP, METAL FILM, 1/20W 27K OHM J
RB98	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RB031	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RB032	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RB033	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RB051	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RB052	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RB512	24011100	CHIP, METAL FILM, 1/20W 10 OHM J
RB551	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RB552	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RB553	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RC01	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RC02	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RC03	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RC04	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RC05	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RC06	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RC07	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RC08	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RC09	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RC10	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RC13	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RC14	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RI01	24011270	CHIP, METAL FILM, 1/20W 27 OHM J
RI02	24011512	CHIP, METAL FILM, 1/20W 5.1K OHM J
RI03	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RI04	24011470	CHIP, METAL FILM, 1/20W 47 OHM J
RI05	24011361	CHIP, METAL FILM, 1/20W 360 OHM J
RI06	24011519	METAL FILM CHIP, 1/16W 5.1 J
RI07	24011360	METAL FILM CHIP, 1/20W 36 J
RI08	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RI09	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RI11	24011113	CHIP, METAL FILM, 1/20W 11K OHM J
RI13	24011112	CHIP, METAL FILM, 1/20W 1.1K OHM J
RI14	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RI15	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RI16	24011122	CHIP, METAL FILM, 1/20W 1.2K OHM J
RI17	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RI18	24011132	CHIP, METAL FILM, 1/20W 1.3K OHM J
RI19	24011391	CHIP, METAL FILM, 1/20W 390 OHM J
RI20	24011821	CHIP, METAL FILM, 1/20W 820 OHM J
RI21	24011271	CHIP, METAL FILM, 1/20W 270 OHM J
RI22	24011475	METAL FILM CHIP, 1/16W 4R7M K
RI23	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RI27	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RI28	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RI30	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RI32	24366750	CARBON FILM, 1/6W 75 OHM J
RI33	24011124	CHIP, METAL FILM, 1/20W 120K OHM J
RI35	24011563	CHIP, METAL FILM, 1/20W 56K OHM J
RI36	24011683	CHIP, METAL FILM, 1/20W 68K OHM J
RI51	24066046	VARIABLE. CARBON, 0.1W 20K N
RI52	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RJ01	24000633	METAL FILM, 1/4W 10K OHM F

Location No.	Parts No.	Description
RJ02	24000359	METAL FILM, 1/4W 1.1K OHM F
RJ03	24366512	CARBON FILM, 1/6W 5.1K OHM J
RJ05	24310159	OXIDE METAL FILM, 1/2W 1.5 OHM J
RJ06	24382471	OXIDE METAL FILM, 1W 470 OHM J
RJ07	24310109	OXIDE METAL FILM, 1/2W 1 OHM J
RJ08	24366102	CARBON FILM, 1/6W 1K OHM J
RJ41	24000445	CHIP JUMPER, 1608TYPE
RJ42	24000445	CHIP JUMPER, 1608TYPE
RJ43	24000445	CHIP JUMPER, 1608TYPE
RJ44	24000445	CHIP JUMPER, 1608TYPE
RJ45	24000445	CHIP JUMPER, 1608TYPE
RJ46	24000445	CHIP JUMPER, 1608TYPE
RJ47	24000445	CHIP JUMPER, 1608TYPE
RS01	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS02	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS03	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS04	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS05	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS06	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS07	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS08	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS09	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS10	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS11	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS12	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS13	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS14	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS15	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS16	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS17	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS18	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS19	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS20	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS21	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RS22	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RS25	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS26	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS29	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS30	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS31	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS32	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS33	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS34	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS37	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS38	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS39	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS40	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS41	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS42	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS45	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS46	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS47	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS48	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS49	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS50	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS51	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
RS52	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS55	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS56	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS57	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS58	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS59	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS60	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RS61	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RS62	24011101	CHIP, METAL FILM, 1/20W 100 OHM J

Location No.	Parts No.	Description
RS63	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS64	24011393	CHIP, METAL FILM, 1/20W 39K OHM J
RS65	24011563	CHIP, METAL FILM, 1/20W 56K OHM J
RS66	24011393	CHIP, METAL FILM, 1/20W 39K OHM J
RS67	24011563	CHIP, METAL FILM, 1/20W 56K OHM J
RS101	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS102	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS103	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS104	24011104	CHIP, METAL FILM, 1/20W 100K OHM J
RS107	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS108	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS109	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
RS110	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS112	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS113	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
RS114	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RS116	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RS120	24366271	CARBON FILM, 1/6W 270 OHM J
RS121	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS122	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RS123	24011473	CHIP, METAL FILM, 1/20W 47K OHM J
RS124	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RS125	24011333	CHIP, METAL FILM, 1/20W 33K OHM J
RS126	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RV01	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV03	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV06	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV07	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RV08	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV09	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV10	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV11	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV12	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV14	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RV15	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV17	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV19	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV20	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV21	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV26	24011561	CHIP, METAL FILM, 1/20W 560 OHM J
RV27	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV29	24552101	OXIDE METAL FILM, 1/2W 100 OHM J
RV30	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV33	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV34	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV35	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV36	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV37	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV40	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV41	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV60	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV61	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV62	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV66	24011750	CHIP, METAL FILM, 1/20W 75 OHM J
RV68	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV69	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV70	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV71	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV72	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV73	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV74	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV75	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RV76	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
RV77	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV78	24011101	CHIP, METAL FILM, 1/20W 100 OHM J

Location No.	Parts No.	Description
RV79	24011272	CHIP, METAL FILM, 1/20W 2.7K OHM J
RV82	24011562	CHIP, METAL FILM, 1/20W 5.6K OHM J
RV100	24366750	CARBON FILM, 1/6W 75 OHM J
RV101	24366750	CARBON FILM, 1/6W 75 OHM J
RV102	24366750	CARBON FILM, 1/6W 75 OHM J
RV103	24366332	CARBON FILM, 1/6W 3.3K OHM J
RV323	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV324	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV325	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV330	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV331	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV332	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV337	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV338	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV346	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV347	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV348	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV351	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RV352	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RV353	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RV354	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RV355	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RV356	24011330	CHIP, METAL FILM, 1/20W 33 OHM J
RV358	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RV359	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RX11	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RX12	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RY101	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY102	24011221	CHIP, METAL FILM, 1/20W 220 OHM J
RY103	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RY104	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RY105	24011821	CHIP, METAL FILM, 1/20W 820 OHM J
RY106	24000445	CHIP JUMPER, 1608TYPE
RY107	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY109	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RY110	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RY501	24011303	CHIP, METAL FILM, 1/20W 30K OHM J
RY502	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RY503	24011223	CHIP, METAL FILM, 1/20W 22K OHM J
RY504	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RY505	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
RY507	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RY508	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY509	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RY510	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RY511	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY512	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY513	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RY516	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RY517	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RY518	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RY519	24000445	CHIP JUMPER, 1608TYPE
RY520	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY521	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY523	24011122	CHIP, METAL FILM, 1/20W 1.2K OHM J
RY524	24011681	CHIP, METAL FILM, 1/20W 680 OHM J
RY525	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY526	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY527	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY528	24011222	CHIP, METAL FILM, 1/20W 2.2K OHM J
RY529	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RY532	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY533	24000445	CHIP JUMPER, 1608TYPE
RY534	24000445	CHIP JUMPER, 1608TYPE
RY541	24011682	CHIP, METAL FILM, 1/20W 6.8K OHM J
RY542	24011392	CHIP, METAL FILM, 1/20W 3.9K OHM J
RY543	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RY545	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY548	24011102	CHIP, METAL FILM, 1/20W 1K OHM J
RY550	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RY551	24011182	CHIP, METAL FILM, 1/20W 1.8K OHM J
RY552	24011152	CHIP, METAL FILM, 1/20W 1.5K OHM J
RY560	24011332	CHIP, METAL FILM, 1/20W 3.3K OHM J
RY561	24011471	CHIP, METAL FILM, 1/20W 470 OHM J
RY562	24011101	CHIP, METAL FILM, 1/20W 100 OHM J
RY573	24011472	CHIP, METAL FILM, 1/20W 4.7K OHM J
RY575	24011103	CHIP, METAL FILM, 1/20W 10K OHM J
RY576	24011123	CHIP, METAL FILM, 1/20W 12K OHM J
COILS & TRANSFORMERS		
L101	23289845	COIL, PEAKING, TRF4680AT
L103	23289844	COIL, PEAKING, TRF4470AT
L111	23289845	COIL, PEAKING, TRF4680AT
L113	23289842	COIL, PEAKING, TRF4220AT
L115	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
L121	23238562	COIL, PEAKING, TRF4109AJ
L122	23238562	COIL, PEAKING, TRF4109AJ
L301	23103145	FERRITE CHOKE, TEM2011AA
L302	23289846	COIL, PEAKING, TRF4101AT
L401	23280022	COIL, PEAKING, TRF4101AZ
⚠ L441	23233986	COIL, HORIZ LINIALTY, TLN2209AG
L442	23248282	COIL, CHOKE, TLN3458AH
L450	23248305	COIL, CHOKE, TLN3346GH
L451	23233064	COIL, TLN2110
⚠ L461	23248310	COIL, CHOKE, TLN3500GH
⚠ L462	23231351	COIL, DEFLECTION YOKE, TDY6368K
L462A	23993080	METAL SHEET, CONVER REVISION, TCCMXH01K
L462B	23006010	FERRITE SHEET, SPOILER POSI, TCRFQP02J
L462C	23006011	FERRITE SHEET, SPOILER NEGA, TCRFQN03J
L462E	23960101	SILICONE RUBBER, TSE-382 RTV
L463	23103145	FERRITE CHOKE, TEM2011AA
L464	23103145	FERRITE CHOKE, TEM2011AA
L465	23289840	COIL, PEAKING, TRF4100AT
L491	23248191	COIL, CHOKE, TLN3351AD
L501	23289844	COIL, PEAKING, TRF4470AT
L503	23280022	COIL, PEAKING, TRF4101AZ
L504	23103827	INDUCTOR, BEAD, TEM2120M
L550	23103146	EMI FILTER, TEM2030AA
L551	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
L582	23248288	COIL, CHOKE, TLN3299GH
L702	23261974	COIL, FERRITE BEAD, HC5-035
L704	23103859	FILTER, FERRITE CHOKE, TEM2011
L705	23103859	FILTER, FERRITE CHOKE, TEM2011
L706	23237987	COIL, PEAKING, TRF4100AC
L805	23248297	COIL, CHOKE, TLN3481GH
L806	23248297	COIL, CHOKE, TLN3481GH
L833	23248321	COIL, CHOKE 15X23H 22MMH 4.2A, TLN3462AH
L834	23280019	COIL, PEAKING, TRF4330AZ
L835	23248248	COIL, CHOKE, TLN3500AH
L836	23248321	COIL, CHOKE 15X23H 22MMH 4.2A, TLN3462AH
L837	23248292	COIL, CHOKE, TLN3499GH
L838	23248292	COIL, CHOKE, TLN3499GH
L839	23248320	COIL, CHOKE 15X23H 100MMH 2.5A, TLN3441AH

Location No.	Parts No.	Description
L840	23280019	COIL, PEAKING, TRF4330AZ
L861	23103145	FERRITE CHOKE, TEM2011AA
L862	23103145	FERRITE CHOKE, TEM2011AA
L883	23103145	FERRITE CHOKE, TEM2011AA
L884	23103145	FERRITE CHOKE, TEM2011AA
L885	23248288	COIL, CHOKE, TLN3299GH
L886	23103145	FERRITE CHOKE, TEM2011AA
L887	23103145	FERRITE CHOKE, TEM2011AA
L888	23248292	COIL, CHOKE, TLN3499GH
L889	23248292	COIL, CHOKE, TLN3499GH
L891	23103145	FERRITE CHOKE, TEM2011AA
L892	23103145	FERRITE CHOKE, TEM2011AA
L895	23103145	FERRITE CHOKE, TEM2011AA
L896	23103145	FERRITE CHOKE, TEM2011AA
⚠ L901	23200498	COIL, DG 0.75CU 50T-2LOOP, TSB-2416AH
L902	23237975	COIL, PEAKING, TRF4101AC
L903	23237975	COIL, PEAKING, TRF4101AC
L904	23237975	COIL, PEAKING, TRF4101AC
L905	23238712	COIL, PEAKING, TRF4150AJ
L906	23238712	COIL, PEAKING, TRF4150AJ
L907	23238712	COIL, PEAKING, TRF4150AJ
L908	23289840	COIL, PEAKING, TRF4100AT
L910	23237999	COIL, PEAKING, TRF4109AC
L911	23289840	COIL, PEAKING, TRF4100AT
LA37	23289836	COIL, PEAKING, TRF42R2AT
LA38	23289836	COIL, PEAKING, TRF42R2AT
LA39	23289836	COIL, PEAKING, TRF42R2AT
LI01	23246051	COIL, CHIP-INDUCTOR-0.22MMH K, COLTRF4R22CE
LI02	23246196	COIL, CHIP INDUCTOR, TRF41R2CG
LI51	23289470	COIL, PEAKING, TRF4470AF
LI52	23289120	COIL, PEAKING, TRF4120AF
LI53	23289180	COIL, PEAKING, TRF4180AF
LI54	23232050	COIL, VARIABLE, TRF3554D
LI55	23289129	COIL, PEAKING 1.0MMH J 0405, TRF41R2AF
LI56	23289180	COIL, PEAKING, TRF4180AF
LI57	23289228	COIL, PEAKING, TRF4R22AF
⚠ LJ901	23200448	COIL, GEOMAGNETIC CORRECTION, TSB-2408AG
LV02	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV03	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV09	23289840	COIL, PEAKING, TRF4100AT
LV13	23289840	COIL, PEAKING, TRF4100AT
LV42	23289840	COIL, PEAKING, TRF4100AT
LV100	23289560	COIL, PEAKING, TRF4560AF
LV200	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV210	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV230	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV231	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV240	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV250	23103146	EMI FILTER, TEM2030AA
LV260	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV261	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV262	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LV270	23103146	EMI FILTER, TEM2030AA
LV271	23289840	COIL, PEAKING, TRF4100AT
LY100	23246223	COIL, CHIP INDUCTOR, TRF4330CG
LY101	23103827	INDUCTOR, BEAD, TEM2120M
LY102	23103827	INDUCTOR, BEAD, TEM2120M
LY104	23246219	COIL, CHIP INDUCTOR, TRF4150CG
LY105	23246219	COIL, CHIP INDUCTOR, TRF4150CG
LY290	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LY291	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
LY292	23103159	FILTER, EMI, TEM2028AA, 7.5X6.4X8 60MMH 0.5A
T400	23224388	TRANSFORMER, FOCUS-T TLN2221AL, TLN2221AL
T401	23224381	TRANSFORMER, HORIZ DRIVE, TLN1080GH
⚠ T461	23236748	TRANSFORMER, HORIZ OUTPUT, TFB4193AD(NO SERVICE PART)
⚠ T801	23211765	COIL, LF LH35V, TRF3239AH
⚠ T840	23217431	TRANSFORMER, CONVERTER, TPW3425AH
⚠ T862	23217618	TRANSFORMER, CONVERTER EER42, TRSTPW3526AS
SEMICONDUCTORS		
Q151	23314994	TRANSISTOR, 2SA1576A106
Q152	23314993	TRANSISTOR, 2SC4081 Q
Q172	23314993	TRANSISTOR, 2SC4081 Q
Q201	23314993	TRANSISTOR, 2SC4081 Q
Q301	23319787	IC, LA7833S
Q301B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
Q302	23000711	IC, TA1317AN
Q360	23314993	TRANSISTOR, 2SC4081 Q
Q370	23114497	TRANSISTOR, RN1406
Q371	23314204	TRANSISTOR, 2SC2412K,Q
Q372	23114497	TRANSISTOR, RN1406
Q373	23314204	TRANSISTOR, 2SC2412K,Q
Q374	23314204	TRANSISTOR, 2SC2412K,Q
Q392	23205045	TRANSISTOR, 2SA1037AKQ
Q402	23314862	TRANSISTOR, FET, 2SK941
Q404	23205149	TRANSISTOR, 2SC5859(FA)
Q404D	72471082	SCREW, 3X10MM
Q410	23314994	TRANSISTOR, 2SA1576A106
Q418	23314141	TRANSISTOR, 2SC3852
Q418B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
Q425	23314993	TRANSISTOR, 2SC4081 Q
Q426	23205177	TRANSISTOR, USM R1=4.7K R2=47K RN1306(TE85L)
Q427	23205177	TRANSISTOR, USM R1=4.7K R2=47K RN1306(TE85L)
Q428	23205177	TRANSISTOR, USM R1=4.7K R2=47K RN1306(TE85L)
Q430	23314141	TRANSISTOR, 2SC3852
Q430B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
Q460	23205031	TRANSISTOR, FET, 2SK2920
Q470	23114759	TRANSISTOR, 2SA949-Y
Q480	23314993	TRANSISTOR, 2SC4081 Q
Q484	23205045	TRANSISTOR, 2SA1037AKQ
Q486	23314204	TRANSISTOR, 2SC2412K,Q
Q510	23009369	IC, TA1360AFG
Q520	23314994	TRANSISTOR, 2SA1576A106
Q521	23314994	TRANSISTOR, 2SA1576A106
Q522	23314994	TRANSISTOR, 2SA1576A106
Q610	23906523	IC, TA8256BH

Location No.	Parts No.	Description
Q610B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
Q611	23314183	TRANSISTOR, 2SC4213-B
Q612	23314994	TRANSISTOR, 2SA1576A106
Q613	70114396	TRANSISTOR, 2SC3326B
Q614	70114396	TRANSISTOR, 2SC3326B
Q615	70114396	TRANSISTOR, 2SC3326B
Q670	23314183	TRANSISTOR, 2SC4213-B
Q683	23314993	TRANSISTOR, 2SC4081 Q
Q705	23114433	TRANSISTOR, 2SC1815-Y
Q706	23114433	TRANSISTOR, 2SC1815-Y
Q707	23114437	TRANSISTOR, 2SC752GTM-Y
Q709	23114433	TRANSISTOR, 2SC1815-Y
Q710	23114425	TRANSISTOR, 2SA1015-Y(TE
Q711	23314909	TRANSISTOR, 2SA1837
Q712	23314912	TRANSISTOR, 2SC4793
Q719	23114433	TRANSISTOR, 2SC1815-Y
Q720	23114433	TRANSISTOR, 2SC1815-Y
⚠ Q801	23135013	IC, STR-Z4317
Q805	23205085	TRANSISTOR, 2SC5343-Y(BUL
Q829	23000804	IC, SI-3090J(LF1101)
Q829B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
Q832	70200563	IC, RESET VS=2.9V, PST9129
Q833	23114458	TRANSISTOR, RN1206
Q834	23000805	IC, SI-3033CA(LF1101)
Q835	23000546	IC, SI-8050SS
Q835B	70391356	SCREW, BITTB3X10 SZN
Q839	23000805	IC, SI-3033CA(LF1101)
Q839B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
Q840	23906133	IC, MIP280
⚠ Q841	23000823	IC, PHOTO COUPLER, TLP421F(GR)
⚠ Q842	23000823	IC, PHOTO COUPLER, TLP421F(GR)
Q843	23314965	TRANSISTOR, KTC3198 Y
⚠ Q862	23000823	IC, PHOTO COUPLER, TLP421F(GR)
⚠ Q883	23319692	IC, SE130N, LF4
Q901	23314780	TRANSISTOR, 2SC4544
Q902	23114433	TRANSISTOR, 2SC1815-Y
Q903	23314780	TRANSISTOR, 2SC4544
Q904	23114433	TRANSISTOR, 2SC1815-Y
Q905	23314780	TRANSISTOR, 2SC4544
Q906	23114433	TRANSISTOR, 2SC1815-Y
Q907	23114735	TRANSISTOR, 2SA102-Y(C)
Q908	23114429	TRANSISTOR, 2SC2120-Y(TE
Q910	23114433	TRANSISTOR, 2SC1815-Y
Q911	23114433	TRANSISTOR, 2SC1815-Y
Q912	23114425	TRANSISTOR, 2SA1015-Y(TE
Q913	23114425	TRANSISTOR, 2SA1015-Y(TE
Q914	23114433	TRANSISTOR, 2SC1815-Y
Q2104	23314962	TRANSISTOR, KTA1266 Y
Q2105	23314962	TRANSISTOR, KTA1266 Y
Q2106	23314962	TRANSISTOR, KTA1266 Y
Q2107	23314962	TRANSISTOR, KTA1266 Y
Q2108	23314962	TRANSISTOR, KTA1266 Y
Q2109	23314962	TRANSISTOR, KTA1266 Y
Q2201	23114460	TRANSISTOR, RN1204
Q2202	23114460	TRANSISTOR, RN1204
Q3103	23314994	TRANSISTOR, 2SA1576A106
Q4021	23205085	TRANSISTOR, 2SC5343-Y(BUL
Q4022	23205081	TRANSISTOR, 2SA1980-Y(BU
Q4460	23314993	TRANSISTOR, 2SC4081 Q
Q4461	23314993	TRANSISTOR, 2SC4081 Q
Q4501	23906335	IC, TA1270AF(J)
Q4690	23314204	TRANSISTOR, 2SC2412K,Q

Location No.	Parts No.	Description
Q4703	23314994	TRANSISTOR, 2SA1576A106
Q4819	23205085	TRANSISTOR, 2SC5343-Y(BUL
QA01	23009506	IC, MCU 1CHIP 16BIT 4M 64P, MN102H85KFK
QA02	23009330	IC, AT24C64-10PI-2.7
QA14	23205045	TRANSISTOR, 2SA1037AKQ
QA70	23319935	IC, MM1096BS
QA71	23314993	TRANSISTOR, 2SC4081 Q
QA72	23314993	TRANSISTOR, 2SC4081 Q
QA80	23906295	IC, UPC29M33HB
QA81	70200563	IC, RESET VS=2.9V, PST9129
QB03	23114498	TRANSISTOR, RN1405
QB05	23314993	TRANSISTOR, 2SC4081 Q
QB11	23114528	TRANSISTOR, 2SC1740S
QB14	23314993	TRANSISTOR, 2SC4081 Q
QB15	23314993	TRANSISTOR, 2SC4081 Q
QB30	23314965	TRANSISTOR, KTC3198 Y
QB44	23314994	TRANSISTOR, 2SA1576A106
QB45	23314993	TRANSISTOR, 2SC4081 Q
QB55	23314993	TRANSISTOR, 2SC4081 Q
QB61	70114402	TRANSISTOR, 2SC3437-Y
QB81	70114396	TRANSISTOR, 2SC3326B
QB82	70114396	TRANSISTOR, 2SC3326B
QB83	23314994	TRANSISTOR, 2SA1576A106
QB84	23314993	TRANSISTOR, 2SC4081 Q
QB85	23314994	TRANSISTOR, 2SA1576A106
QB86	23314994	TRANSISTOR, 2SA1576A106
QB87	23314994	TRANSISTOR, 2SA1576A106
QB88	23314994	TRANSISTOR, 2SA1576A106
QI01	23114611	TRANSISTOR, 2SC3357
QI02	23314994	TRANSISTOR, 2SA1576A106
QI03	23314993	TRANSISTOR, 2SC4081 Q
QI05	23009240	IC, VIF/SIF SSOP24PIN, TA1274F(FA03A5,EL)
QJ02	23000808	IC, LA6500
QJ02B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
QS03	23314993	TRANSISTOR, 2SC4081 Q
QS04	23314993	TRANSISTOR, 2SC4081 Q
QS05	23318977	IC, MC14052BF
QS06	23318977	IC, MC14052BF
QS07	23314183	TRANSISTOR, 2SC4213-B
QS08	23314183	TRANSISTOR, 2SC4213-B
QS09	23114493	TRANSISTOR, RN2404
QS10	23904896	IC, JLC1562BF
QS11	23114499	TRANSISTOR, RN1404
QS12	23114499	TRANSISTOR, RN1404
QS13	23114499	TRANSISTOR, RN1404
QS14	23114499	TRANSISTOR, RN1404
QS101	23906597	IC, BA4558F
QS102	23114493	TRANSISTOR, RN2404
QS103	70114396	TRANSISTOR, 2SC3326B
QS104	70114396	TRANSISTOR, 2SC3326B
QS120	23906597	IC, BA4558F
QV01	23906887	IC, CXA2069Q
QV04	23314993	TRANSISTOR, 2SC4081 Q
QV06	23314994	TRANSISTOR, 2SA1576A106
QV09	23314994	TRANSISTOR, 2SA1576A106
QV12	23009418	IC, 2IN-1OUTSW DRIVER, MM1505XNRE
QV70	23314993	TRANSISTOR, 2SC4081 Q
QV71	23314993	TRANSISTOR, 2SC4081 Q
QV72	23314994	TRANSISTOR, 2SA1576A106
QV73	23314994	TRANSISTOR, 2SA1576A106
QV74	23314993	TRANSISTOR, 2SC4081 Q
QV254	23000360	IC, MM1519XQ
QY100	23906515	IC, TC90A45F
QY101	23314993	TRANSISTOR, 2SC4081 Q

Location No.	Parts No.	Description
QY102	23314993	TRANSISTOR, 2SC4081 Q
QY103	23314994	TRANSISTOR, 2SA1576A106
QY501	23000812	IC, TA1340F
QY502	23205014	TRANSISTOR, 2SC4667-O
QY503	23314994	TRANSISTOR, 2SA1576A106
QY504	23314994	TRANSISTOR, 2SA1576A106
QY507	23314993	TRANSISTOR, 2SC4081 Q
QY511	23314994	TRANSISTOR, 2SA1576A106
QY512	23314994	TRANSISTOR, 2SA1576A106
QY513	23314994	TRANSISTOR, 2SA1576A106
QY514	23314994	TRANSISTOR, 2SA1576A106
QY515	23314994	TRANSISTOR, 2SA1576A106
QY516	23314994	TRANSISTOR, 2SA1576A106
QY518	23314993	TRANSISTOR, 2SC4081 Q
QY520	23314993	TRANSISTOR, 2SC4081 Q
D101	23316755	DIODE, ZENER, MTZJ33C
D230	23316231	DIODE, 1SS355
D301	23357366	DIODE, FR105-B5
D302	23357366	DIODE, FR105-B5
D303	23357366	DIODE, FR105-B5
D318	23118859	DIODE, 1SS133
D321	23316754	DIODE, ZENER, MTZJ33B
D327	23316715	DIODE, ZENER, MTZJ11A
D330	23316794	DIODE, SC570A
D336	23316672	DIODE, ZENER, MTZJ5.6B
D337	23316672	DIODE, ZENER, MTZJ5.6B
D365	23316678	DIODE, ZENER, MTZJ6.8B
D372	23118859	DIODE, 1SS133
D373	23118859	DIODE, 1SS133
D374	23316716	DIODE, ZENER, MTZJ11B
D404	23224366	DIODE, FMQ-3GU
D404B	72471082	SCREW, 3X10MM
D406	23357366	DIODE, FR105-B5
D408	23357366	DIODE, FR105-B5
D412	23357366	DIODE, FR105-B5
D414	23357366	DIODE, FR105-B5
D415	23357366	DIODE, FR105-B5
D419	23316716	DIODE, ZENER, MTZJ11B
D420	23316675	DIODE, ZENER, MTZJ6.2B
D422	23316591	DIODE, ZENER, MA8100-M
D423	23115532	DIODE, ERB12-01
D431	23316690	DIODE, ZENER, MTZJ10B
D432	23115532	DIODE, ERB12-01
D462	23316725	DIODE, ZENER, MTZJ15B
D465	23357366	DIODE, FR105-B5
D469	23118859	DIODE, 1SS133
D470	23316758	DIODE, ZENER, MTZJ36B
D471	23357366	DIODE, FR105-B5
D475	23316720	DIODE, ZENER, MTZJ12C
D476	23118859	DIODE, 1SS133
D480	23316573	DIODE, ZENER, MA8062-L
D481	23118859	DIODE, 1SS133
⚠ D484	23115774	DIODE, ZENER, RD6.2E(FA-1)
D485	23316688	DIODE, ZENER, MTZJ9.1C
D502	23316231	DIODE, 1SS355
D505	23316622	DIODE, ZENER, MA8270-M
D520	23118641	DIODE, ZENER, RD2.0ESA B2
D522	23316231	DIODE, 1SS355
D523	23316231	DIODE, 1SS355
D535	23316591	DIODE, ZENER, MA8100-M
D601	23316231	DIODE, 1SS355
D602	23316231	DIODE, 1SS355
D603	23316231	DIODE, 1SS355
D604	23316231	DIODE, 1SS355
D607	23118262	DIODE, ZENER, RD33MD

Location No.	Parts No.	Description
D611	23316231	DIODE, 1SS355
D612	23118131	DIODE, 1SS193
D613	23316231	DIODE, 1SS355
D614	23316231	DIODE, 1SS355
D615	23316231	DIODE, 1SS355
D616	23316231	DIODE, 1SS355
D617	23316231	DIODE, 1SS355
D704	23118859	DIODE, 1SS133
D705	23118859	DIODE, 1SS133
D715	23118859	DIODE, 1SS133
D721	23118859	DIODE, 1SS133
⚠ D801	23316393	DIODE, VRM=600V IO=6A SIP D5SB60, 4009 F05
D801B	70391356	SCREW
D834	23316269	DIODE, AK04
D835	23316637	DIODE, SCHOTTKY, FMB-G14L
D835B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
D836	23316782	DIODE, ZENER, MTZJ6.2C
D837	23316678	DIODE, ZENER, MTZJ6.8B
⚠ D840	23357207	DIODE, LN1WBA60
D841	23316673	DIODE, ZENER, MTZJ5.6C
D842	23316665	DIODE, ZENER, MTZJ4.7A
D843	23118094	DIODE, EU2A
D845	23118859	DIODE, 1SS133
D846	23118633	DIODE, ZENER, RD3.0ES B2
D847	23118633	DIODE, ZENER, RD3.0ES B2
D848	23118859	DIODE, 1SS133
D855	23118859	DIODE, 1SS133
D856	23316665	DIODE, ZENER, MTZJ4.7A
D862	23357366	DIODE, FR105-B5
D864	23357366	DIODE, FR105-B5
D873	23316690	DIODE, ZENER, MTZJ10B
D875	23316689	DIODE, ZENER, MTZJ10A
D876	23316747	DIODE, ZENER, MTZJ27C
D879	23316747	DIODE, ZENER, MTZJ27C
D881	23118859	DIODE, 1SS133
D883	23357018	DIODE, RL2
D884	23357018	DIODE, RL2
D885	23357042	DIODE, FMX-12S(023-108)
D891	23357042	DIODE, FMX-12S(023-108)
D895	23357042	DIODE, FMX-12S(023-108)
D895B	70391355	SCREW, BIND HEAD TAP-TITE B, BITTB 3X8 SZN
⚠ D899	24019485	VARISTOR, TNR10V431K
D901	23118859	DIODE, 1SS133
D904	23118859	DIODE, 1SS133
D905	23118859	DIODE, 1SS133
D906	23118859	DIODE, 1SS133
D907	23118859	DIODE, 1SS133
D908	23118859	DIODE, 1SS133
D909	23118859	DIODE, 1SS133
D911	23115337	DIODE, 1S1834
D921	23115337	DIODE, 1S1834
D931	23118859	DIODE, 1SS133
D932	23118859	DIODE, 1SS133
D933	23118859	DIODE, 1SS133
D934	23118859	DIODE, 1SS133
D941	23118859	DIODE, 1SS133
D942	23118859	DIODE, 1SS133
D943	23118859	DIODE, 1SS133
D946	23118859	DIODE, 1SS133
D963	23118859	DIODE, 1SS133
D964	23118859	DIODE, 1SS133
D965	23118859	DIODE, 1SS133

Location No.	Parts No.	Description
D966	23118859	DIODE, 1SS133
D4401	23316591	DIODE, ZENER, MA8100-M
D4603	23316231	DIODE, 1SS355
D4819	23316454	SCR, SF0R3G42NG5H
DA02	23316574	DIODE, ZENER CHIP VZ6.05-6.36V MA8062-M
DA23	23316231	DIODE, 1SS355
DA43	23316231	DIODE, 1SS355
DA44	23316231	DIODE, 1SS355
DA45	23316231	DIODE, 1SS355
DA46	23316231	DIODE, 1SS355
DA70	23316231	DIODE, 1SS355
DB01	23358564	DIODE, LED, SLR-56VC3FPQ
DB03	23358522	DIODE, LED, SIR-56SB3F
DB05	23118538	DIODE, ZENER, RD6.2ESA B2
DB30	23316231	DIODE, 1SS355
DB30	23316792	DIODE, SC215
DB31	23316231	DIODE, 1SS355
DB31	23118859	DIODE, 1SS133
DB61	23316231	DIODE, 1SS355
DS120	23316740	DIODE, ZENER, MTZ J 22D
DV07	23316577	DIODE, ZENER, MA8068-M
DV14	23316577	DIODE, ZENER, MA8068-M
DV21	23316577	DIODE, ZENER, MA8068-M
DV241	23316591	DIODE, ZENER, MA8100-M
DV242	23316591	DIODE, ZENER, MA8100-M
DV243	23316591	DIODE, ZENER, MA8100-M
DV244	23316591	DIODE, ZENER, MA8100-M
DV249	23316591	DIODE, ZENER, MA8100-M
DV250	23316591	DIODE, ZENER, MA8100-M
DV251	23316577	DIODE, ZENER, MA8068-M
DV252	23316577	DIODE, ZENER, MA8068-M
DV256	23316591	DIODE, ZENER, MA8100-M
DV257	23316591	DIODE, ZENER, MA8100-M
DV258	23316591	DIODE, ZENER, MA8100-M
MISCELLANEOUS		
B205C	23845856	WIRE CLAMP, POF COAT) L=70MM
B213	23035412	SCREW, BTB4X12SZN
B232	23037312	SCREW, BTBW3X12SZN
B248	23845859	HOLDER, WIRE, PVC-C0AT, L=70MM
B270	23037312	SCREW, BTBW3X12SZN
B271	23712308	SCREW, PP3X0.5X8SZN
BB13A	23903022	CONNECTOR, BASE B-B 8P 2.5 JST
BB13B	23903022	CONNECTOR, BASE B-B 8P 2.5 JST
BB14A	23713014	CONNECTOR, BRIDGE PLUG 16P 1.5
BB14B	23713013	CONNECTOR, SOCKET, B-B 16P 1.5
BB50A	23713014	CONNECTOR, BRIDGE PLUG 16P 1.5
BB50B	23713013	CONNECTOR, SOCKET, B-B 16P 1.5
BB60A	23713014	CONNECTOR, BRIDGE PLUG 16P 1.5
BB60B	23713013	CONNECTOR, SOCKET, B-B 16P 1.5
BB70A	23713014	CONNECTOR, BRIDGE PLUG 16P 1.5
BB70B	23713013	CONNECTOR, SOCKET, B-B 16P 1.5
BB130	23368627	CONNECTOR, BRIDGE B-B 8P 2.5JST 08TM-2.5FJ-E
E907	23198692	EARTH WIRE, CRT EARTH36ZP50, 36ZP50;C995229E
E912	23528016	RUBBER, WEDGE, MEDIUM W10H15L50, TRWMED01T
E920	23845564	CLAMPER
E940	23965900	TAPE, GLASS-CLOTH, W/ADHESIVE W=18 T=0.18
⚠ F470	23144897	FUSE, 2A 125V
F470A	23165433	FUSE HOLDER, 5.2 SOC
F470B	23165433	FUSE HOLDER, 5.2 SOC
⚠ F801	23144518	FUSE, CARTRIDGE, 125V 10A

Location No.	Parts No.	Description
F801A	23165433	FUSE HOLDER, 5.2 SOC
F801B	23165433	FUSE HOLDER, 5.2 SOC
⚠ F840	23144581	FUSE, AXIAL, 125V 200MA
⚠ F860	23144456	FUSE, AXIAL, 125V 5.0A
⚠ F889	23144681	FUSE, CARTRIDGE 5X20 125V 4.0A
F889A	23165433	FUSE HOLDER, 5.2 SOC
F889B	23165433	FUSE HOLDER, 5.2 SOC
G101	24011151	CHIP, METAL FILM, 1/20W 150 OHM J
G102	24011151	CHIP, METAL FILM, 1/20W 150 OHM J
G400	24946561	CARBON COMPOSITION, 1/2W 560 OHM K
G403	24946223	CARBON COMPOSITION, GF 1/2W 22K K
G404	23103145	FERRITE CHOKE, TEM2011AA
G410	23316731	DIODE, ZENER, MTZJ18B
G499	24503361	PLASTIC FILM CQ921 M 100V 1200PF J
G500	23289470	COIL, PEAKING, TRF4470AF
⚠ G883	23118631	DIODE, ZENER, RD3.3ESA B2
GJ04	24000445	CHIP JUMPER, 1608TYPE
GJ17	24000445	CHIP JUMPER, 1608TYPE
GJ19	24000445	CHIP JUMPER, 1608TYPE
GJ33	24000445	CHIP JUMPER, 1608TYPE
GJ101	24000445	CHIP JUMPER, 1608TYPE
GJ102	24000445	CHIP JUMPER, 1608TYPE
GJ103	24000445	CHIP JUMPER, 1608TYPE
GJ105	24000445	CHIP JUMPER, 1608TYPE
GJ203	24000445	CHIP JUMPER, 1608TYPE
GJ213	24000445	CHIP JUMPER, 1608TYPE
GJ255	24000445	CHIP JUMPER, 1608TYPE
GJ256	24000445	CHIP JUMPER, 1608TYPE
GJ267	24000445	CHIP JUMPER, 1608TYPE
GJ275	24000445	CHIP JUMPER, 1608TYPE
GJ401	24000445	CHIP JUMPER, 1608TYPE
GJ501	24000445	CHIP JUMPER, 1608TYPE
GJ502	24000445	CHIP JUMPER, 1608TYPE
GJ561	24000445	CHIP JUMPER, 1608TYPE
GJ562	24000445	CHIP JUMPER, 1608TYPE
GJ563	24000445	CHIP JUMPER, 1608TYPE
GJ572	24000445	CHIP JUMPER, 1608TYPE
GJ573	24000445	CHIP JUMPER, 1608TYPE
GJ599	24000445	CHIP JUMPER, 1608TYPE
GJ601	24000445	CHIP JUMPER, 1608TYPE
GJ602	24000445	CHIP JUMPER, 1608TYPE
GJA33	24000445	CHIP JUMPER, 1608TYPE
GR90	24011474	CHIP, METAL FILM, 1/20W 470K OHM J
GR503	24000445	CHIP JUMPER, 1608TYPE
GR505	24000445	CHIP JUMPER, 1608TYPE
GS501	24000445	CHIP JUMPER, 1608TYPE
GS502	24000445	CHIP JUMPER, 1608TYPE
H002	23148042	IF MODULE, US WOW MSP3440G, MVUS51
H003	23124087	ANTENNA SWITCH, 2I3O BUNPAI US, RSU135X1
H003A	23740989	NUT, F-CONNECTOR 2H BS
JY508	24000445	CHIP JUMPER, 1608TYPE
JY509	24000445	CHIP JUMPER, 1608TYPE
M461A	23192957	ANODE CAP ASSY, TCC5602AT
M461B	23509111	FOCUS CABLE
M461C	23509372	CABLE ASSY, SCREEN
N805E	23960136	ADHESIVE, SILICONE, TSE3843-W
P311A	23902655	CONNECTOR, B-B 15P
P311B	23367724	CONNECTOR, PLUG B-B 15P
P312A	23902655	CONNECTOR, B-B 15P
P312B	23367724	CONNECTOR, PLUG B-B 15P
P540	23903176	SOCKET, SOCKET 60P TKD 136901160W4
⚠ P801	23372233	POWER CORD, U/C FL 125V7A KARI
PV01	23023094	JACK, PIN 1S6P SMK LAP5120-0205FC
PV02	23365819	JACK, 1S3P

Location No.	Parts No.	Description
PV02	23023096	JACK, PIN 10P SMK LAP5120-0401FC
PV05	23023095	JACK, PIN 8P SMK LAP5120-0411FC
S601	23344456	SWITCH, SLIDE SK22F28G9A MORNI
SA01	23145227	SWITCH, PUSH, 1C1P
SA02	23145227	SWITCH, PUSH, 1C1P
SA03	23145227	SWITCH, PUSH, 1C1P
SA04	23145227	SWITCH, PUSH, 1C1P
SA05	23344335	SWITCH, PUSH, 2C2P
SA06	23145227	SWITCH, PUSH, 1C1P
SA07	23145227	SWITCH, PUSH, 1C1P
⚠ SR81	23146577	RELAY, DLS5D1-O(M)0.25W
⚠ SR83	23146564	RELAY, DC12V, TV5, DG-3
UV02	23148067	MODULE, 03DVI MODULE PD0647
UZ01	23148052	SCAN CONVERTER MODUL, G.HYPER, MVPU41
⚠ V901A	23902824	SOCKET, CRT 10P
V901B	23102456	FUKA MAGNET, CHEVRON TAKECHI , MAG4006
V901M	23102465	CONVERGENCE MAGNET, 32.5D4 LEAD, MAG-1108
W661	23351121	SPEAKER, SPK1385, 80X120 8-OHM 10W
W662	23351121	SPEAKER, SPK1385, 80X120 8-OHM 10W
W663	23351194	SPEAKER, SPK1392BO
X401	23153721	CERAMIC RESONATOR, 503KHZ
X4402	23153721	CERAMIC RESONATOR, 503KHZ
XA01	23153533	CERAMIC RESONATOR, CERA RESO, TCR1082AM
XY501	23153961	CRYSTAL, 3.58MHZ
XY502	23153721	CERAMIC RESONATOR, 503KHZ
Z401	23140203	SPARK GAP, 2.0-3.0KV C-010, AG20PC152F-L3N
ZI51	23303197	PIF SAW FILTER, TSF1248P
ZI52	23303271	FILTER, TRAP 4.5MHZ, TCF1138AM
ZI53	23303289	FILTER, TCF1141AM
ZI55	23303244	FILTER, CERAMIC TRAP, TCF1121AM

PC BOARD ASSEMBLIES

U001	23788431	SIGNAL BOARD, PD1086
U002	23788432	POWER/DEF BOARD, PD1087
U004	23788710	CRT-D/SVM BOARD, PD1173B
U005	23788434	VERT BOARD, PD1090
U006	23788435	AC-IN BOARD, PD1091
U007	23788649	IF BOARD, PD1022B
UA01	23788436	CONT BOARD, PD1088-1
UA02	23788437	LED BOARD, PD1088-2

PICTURE TUBE

⚠ V901	23324045	PICTURE TUBE, 34VPFW RAC V2, W86LTQ350X(V2)

TUNER

⚠ H001	23321470	TUNER, US181CH IIC PH 5V SANYO, ELA52LX4
⚠ HY01	23321470	TUNER, US181CH IIC PH 5V SANYO, ELA52LX4

ACCESSORIES

KB01	23000852	IC, REMOTE PHOTO RECEIVER, PIC-37043TE2
⚠ Y101	23565963	OWNER'S MANUAL, ENGLISH/FRENCH, 34HF83
Y126	23945015	BAG, POLYETHYLENE COVER 250X400
Y127	23945015	BAG, POLYETHYLENE COVER 250X400
⚠ Y160	23306497	REMOCON HAND UNIT IR, CTVUSA, CT-90159

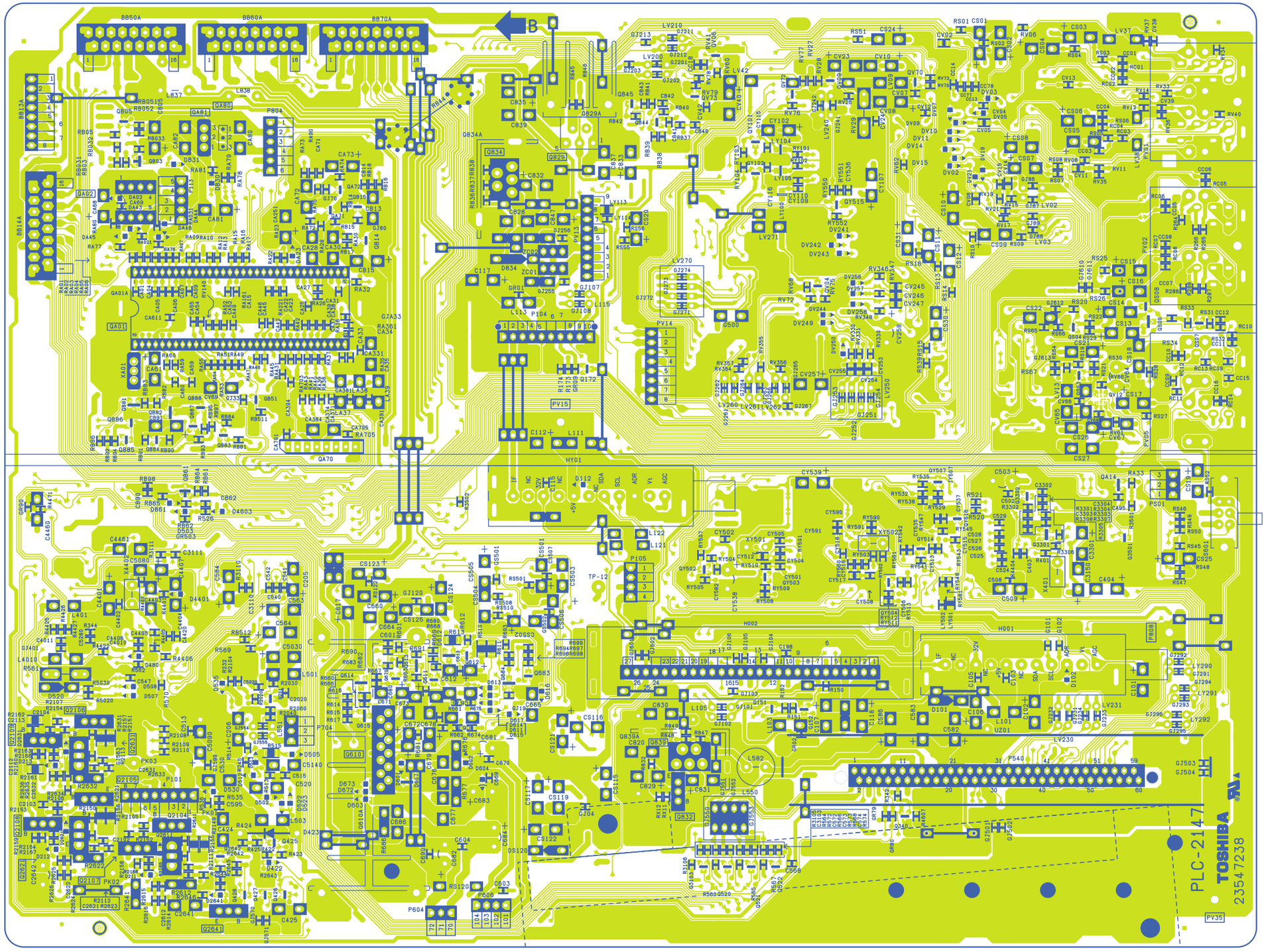
Location No.	Parts No.	Description

CABINET PARTS

⚠ A201	23530900	COVER, FRONT COVER ASSY, 34HF83
A205	23802275	BOX, SP BOX (R) 25ZS5, 25ZS5:S1399E246
A208	23802203	BOX, SP BOX (L) 25ZS5, 25ZS5:S1399E240
A303	23929657	PIECE, HOLDER BUTTON, 32ZP57
⚠ A401	23530261	BACK COVER, 36ZP57, (NO SERVICE PART)
A401S	23530902	COVER, BACK COVER SERVICE34HF8, 34HF83
A419	23989284	LABEL, CD NUMBER
A420	23845511	BAND
A434	23845856	WIRE CLAMP, POF COAT) L=70MM
A701A	23067165	CARTON, TOP CASE, 34HF83
A701B	23067166	CARTON, BOTTOM CASE, 34HF83
A702A	23946525	PACKING, TOP PACKING, 34HF83
A702B	23946526	PACKING, BOTTOM PACKING, 34HF83
A703	23531074	PACKING, HOGO SHEET, 36ZP5
A704	23943618	POLYETHYLENE BAG
A710	23845450	JOINT, 43G7UXC
A902	23428204	DOOR, DOOR PROPER, 34HF83
A903	23451976	PUSH CATCH, CLICK
A904	23445722	BUTTON, BUTTON POWER, 34HF83
A914	23436814	HANDLE, HANDLE, 36ZP58;A025038E

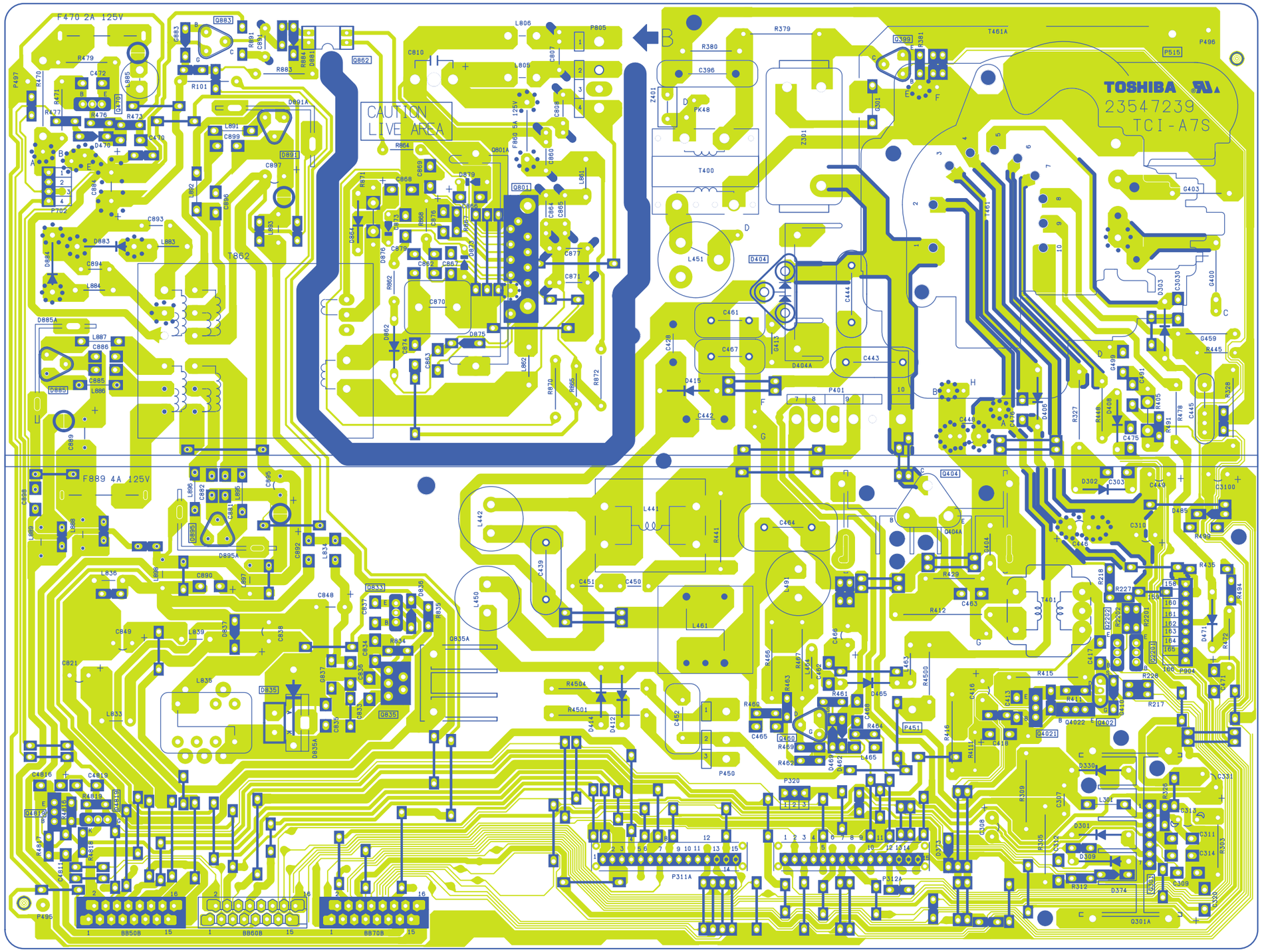
SIGNAL BOARD PD1086

BOTTOM (FOIL) SIDE



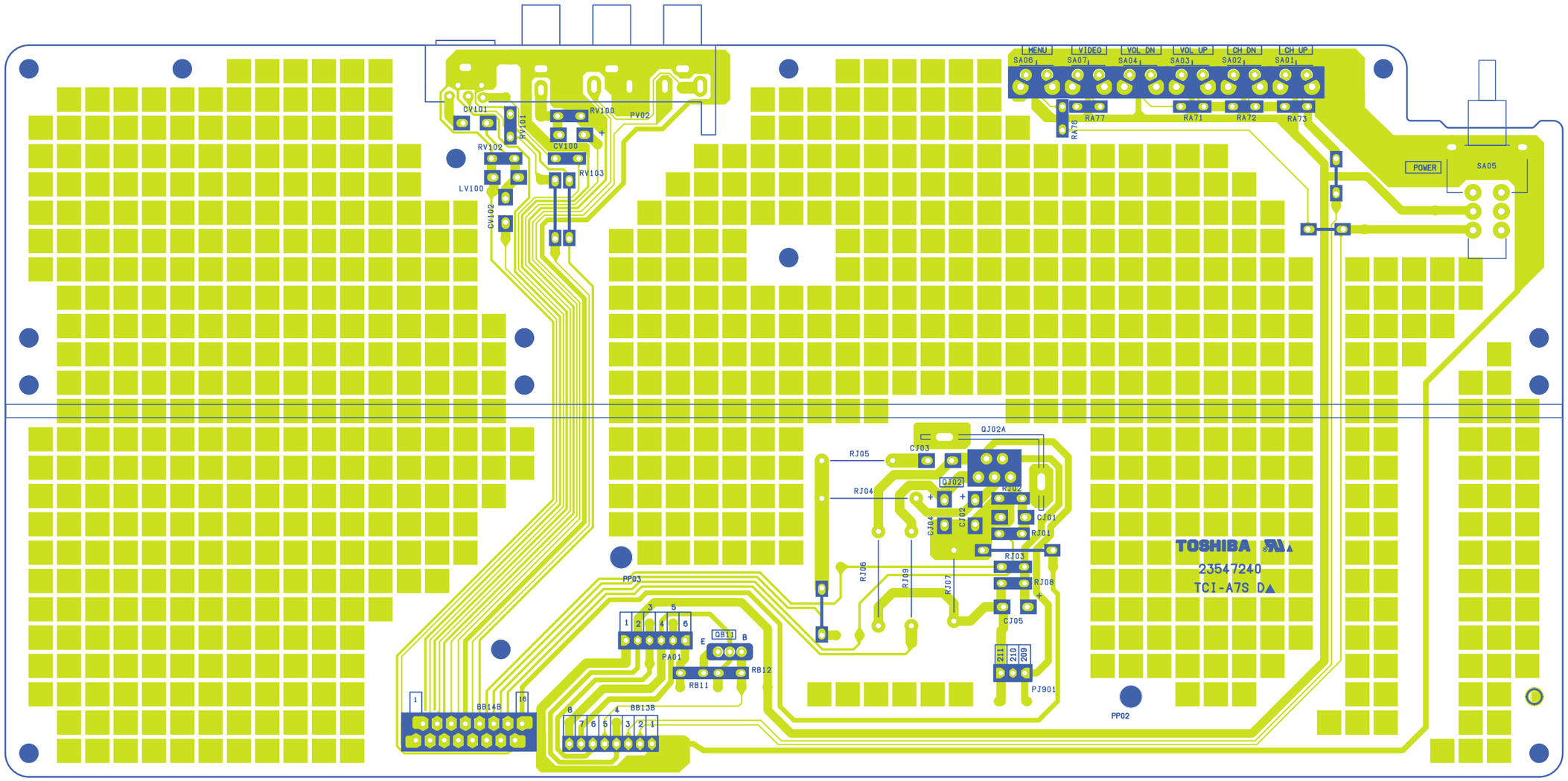
POWER/DEF BOARD PD1087

BOTTOM (FOIL) SIDE



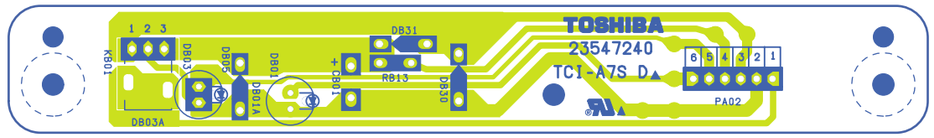
CONT BOARD PD1088-1

BOTTOM (FOIL) SIDE



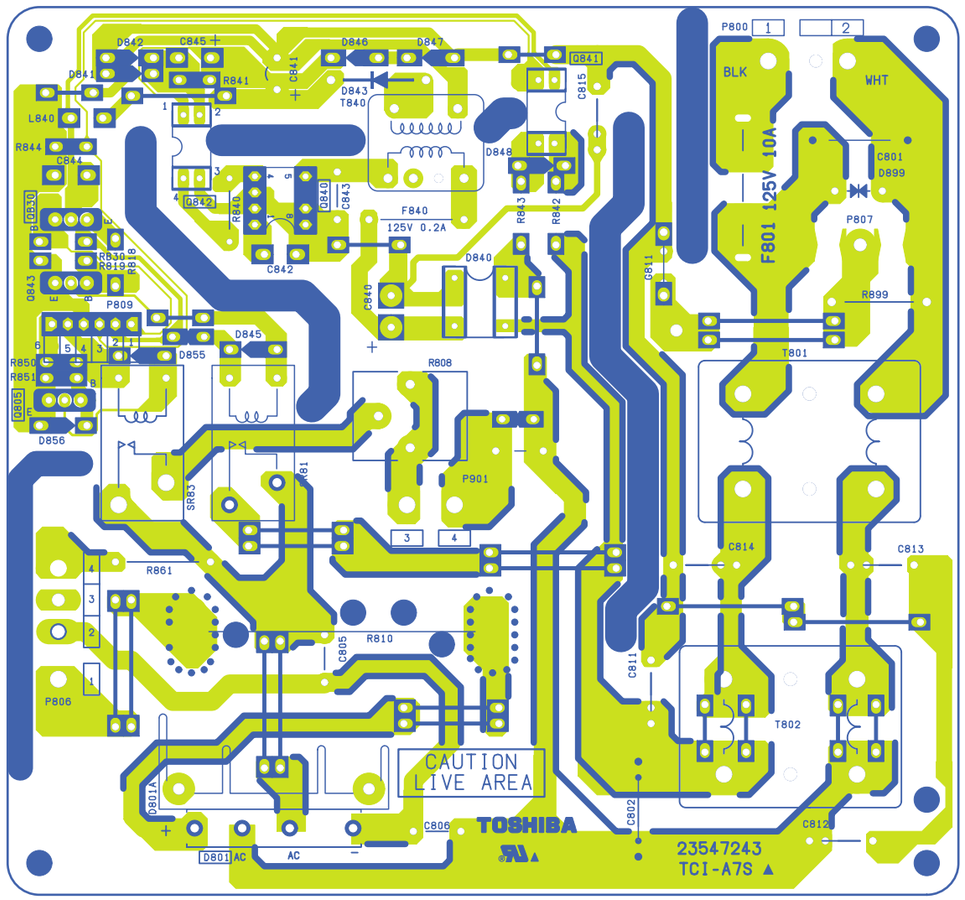
LED BOARD PD1088-2

BOTTOM (FOIL) SIDE



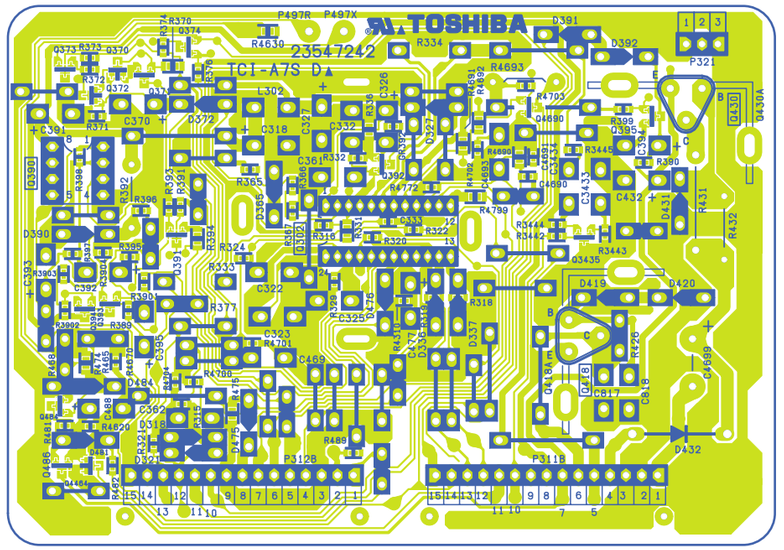
AC-IN BOARD PD1091

BOTTOM (FOIL) SIDE



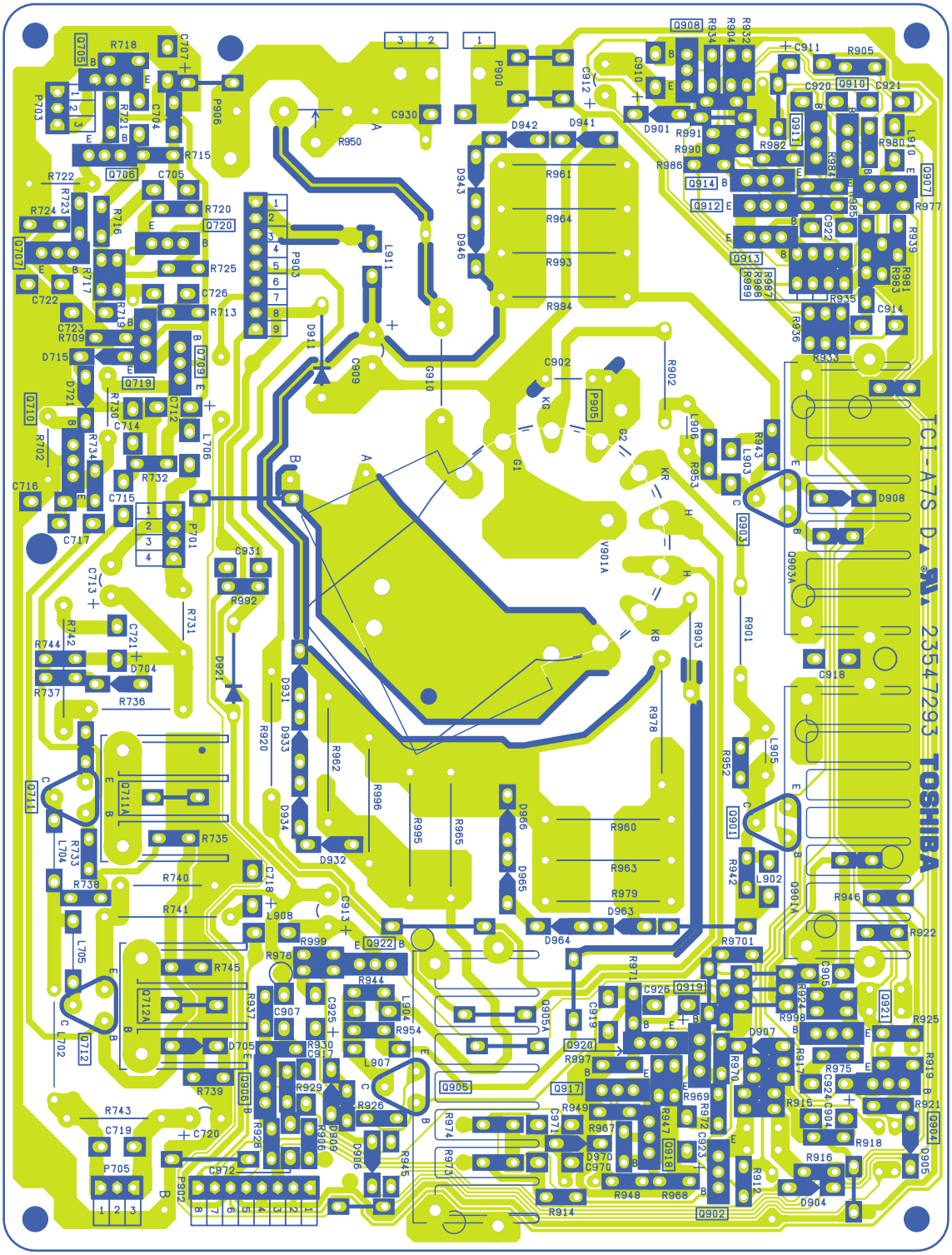
VERT BOARD PD1090

BOTTOM (FOIL) SIDE



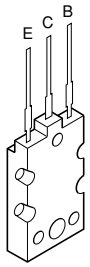
CRT-D/SVM BOARD PD1173B

BOTTOM (FOIL) SIDE

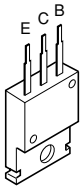


TERMINAL VIEW OF TRANSISTORS

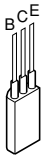
① 2SD2253
(old)
2SC5243



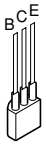
② 2SC3852
2SD1763A
2SC1569
2SC4544
2SA1788
2SA1306
2SA1186A



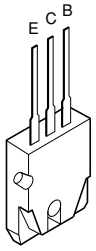
③ 2SC752GTM
2SC2482
2SC2655
2SC4721P



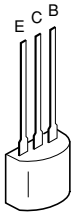
④ 2SC752
2SA562TM
2SA1015
2SC1815
2SC2878
2SC1740S
2SC2120
2SA9335



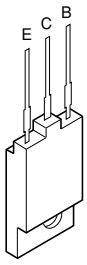
⑤ 2SA1788



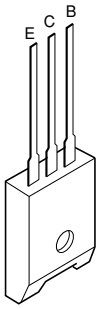
⑥ RN2203
RN2201
RN2004
RN1203
RN1204
RN2204
RN1205
RN1202
RN1201



⑦ 2SD1554
2SD2253
2SD1556
2SC5143
2SC5570
2SD2553



⑧ ON4409



SCHEMATIC DIAGRAM

MODEL : 34HF83

WARNING: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON THE MANUAL FOR THIS MODEL.

CAUTION: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

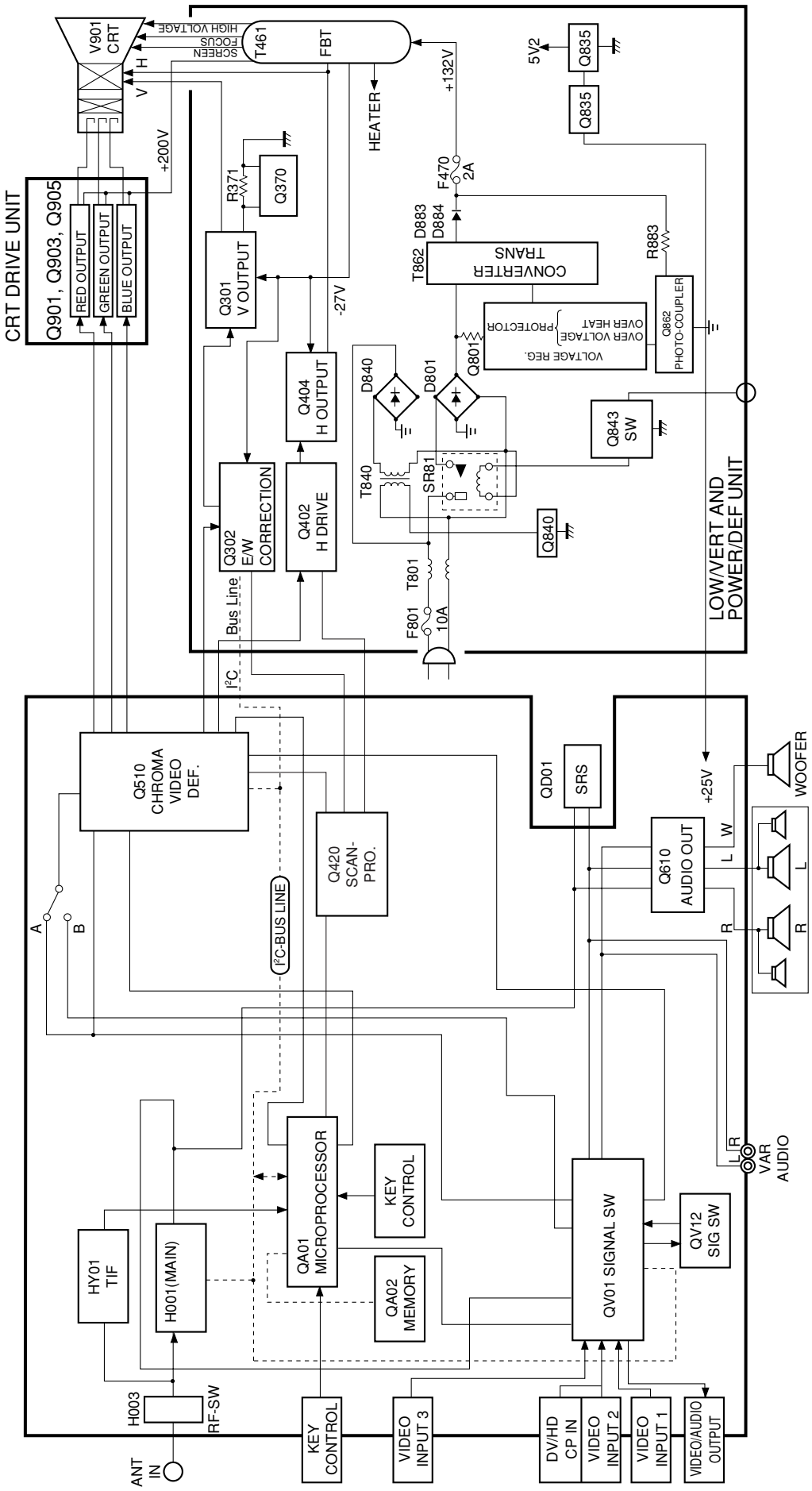
NOTE:

1. RESISTOR Resistance is shown in ohm [K = 1.000, M = 1.000.000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.
   1/2R = Metal or Metal oxide of 1/2 watt 1/2S = Carbon compsistion of 1/2 watt
   1RF = Fuse resistor of 1 watt 10W = Cement of 10 watt
   K = ±10% G = ±2% F = ±1%
2. CAPACITOR Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in μF, and the values more than 1 in pF.
   All capacitors are ceramic 50V, unless otherwise noted as the following marks.
   ⊣(+)⊢ Electolytic capacitor ⊣(M)⊢ Mylar capacitor
3. The parts indicated with " ⚠ " have special characteristics, and should be replaced with identical parts only.
4. Voltages read with DIGITAL MULTI-METER from point indicated to chassing ground, using a color bar signal with all controls at normal, line voltage 120 volts.
5. Waveforms are taken receiving color bar signal with enough sensitivity.
6. Voltage reading shown are nominal values and may vary ±20% except H.V.

■ SCHEMATIC DIAGRAM STRUCTURE:

- SIGNAL Circuit
  - Sheet assignment [SHEET - 1] 1/25
  - AV-1 [SHEET - 2] 2/25
  - AV-2 [SHEET - 3] 3/25
  - PIP [SHEET - 4] 4/25
  - Maicon [SHEET - 5] 5/25
  - BEP [SHEET - 6] 6/25
  - BEP2 [SHEET - 7] 7/25
  - LOWB-REG [SHEET - 8] 8/25
  - AUDIO OUT [SHEET - 9] 9/25
  - IF [SHEET - 10] 10/25
  - BANKAN [SHEET - 98] 11/25
  - BB CONNECTER [SHEET - 99] 12/25
- POWER / DEF Circuit
  - BANKAN [SHEET - 1/6] 13/25
  - H-DEF [SHEET - 2/6] 14/25
  - V-DEF [SHEET - 3/6] 15/25
  - MAIN-POWER [SHEET - 4/6] 16/25
  - SUB-POWER [SHEET - 5/6] 17/25
  - DQF / OPC / OTHER [SHEET - 6/6] 18/25
- CRT DRIVE / SVM Circuit
  - CRT DRIVE [SHEET - 1/2] 19/25
  - SVM [SHEET - 2/2] 20/25
- VERTICAL Circuit 21/25
- AC INPUT Circuit 22/25
- IF Circuit 23/25
- CONTROL Circuit 24/25
- LED Circuit 25/25

CIRCUIT BLOCK DIAGRAM



SPECIFICATIONS

Television System
NTSC standard

Channel Coverage
VHF: 2 through 13
UHF: 14 through 69
Cable TV: Mid band (A-8 through A-1, A through I)
Super band (J through W)
Hyper band (AA through ZZ, AAA, BBB)
Ultra band (65 through 94, 100 through 125)

Power Source
120 V AC, 60 Hz

Power Consumption
150 W (average)

Audio Power
10 W + 10 W + 13 W sub-woofer

Speaker Type
Two 6 x 12 cm + one 10 cm round sub-woofer

Video/Audio Terminals
S-VIDEO INPUT
Y : 1 V(p-p), 75 ohm, negative sync.
C : 0.286 V(p-p) (burst signal), 75 ohm
VIDEO/AUDIO INPUT
VIDEO: 1 V(p-p), 75 ohm, negative sync.
AUDIO: 150 mV(rms) (30% modulation equivalent, 47 k ohm)
ColorStream® (component video) INPUT
Y : 1V(p-p), 75 ohm
P_R: 0.7 V(p-p), 75 ohm
P_B: 0.7 V(p-p), 75 ohm
AUDIO: 150 mV(rms), 47 k ohm
VIDEO/AUDIO OUTPUT
VIDEO: 1 V(p-p), 75 ohm, negative sync.
AUDIO: 150 mV(rms) (30% modulation equivalent, 4.7 k ohm)
VARIABLE AUDIO OUTPUT
0–300 mV(rms) (30% modulation equivalent, 4.7 k ohm)
AUDIO CENTER CHANNEL INPUT
300 mV(rms) (30% modulation equivalent, 10 k ohm)
DVI/HDCP INPUT
HDCP compliant
E-EDID* 1.3 compliant
DVI-D uncompressed, high-speed, digital single-link connection
Suggested scan rates: 1080i, 480p, 480i

Dimensions
Width 36-13/16 inches (935 mm)
Height 24-39/64 inches (625 mm)
Depth 23-25/32 inches (604 mm)

Mass
75.7kg

Supplied Accessories
Remote Control with 2 size “AA” alkaline batteries

Optional Stand
ST34W63

Design and specifications are subject to change without notice.

_____
* E-EDID = Enhanced-Extended Display Identification

* Please refer to owner's manual in detail.

– END –

TOSHIBA CORPORATION
1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN

SCHEMATIC DIAGRAM

MODEL : 34HF83

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  - BEP [SHEET - 6] 6/25
  - BEP2 [SHEET - 7] 7/25
  - LOWB-REG [SHEET - 8] 8/25
  - AUDIO OUT [SHEET - 9] 9/25
  - IF [SHEET - 10] 10/25
  - BANKAN [SHEET - 98] 11/25
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  - BANKAN [SHEET - 1/6] 13/25
  - H-DEF [SHEET - 2/6] 14/25
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  - MAIN-POWER [SHEET - 4/6] 16/25
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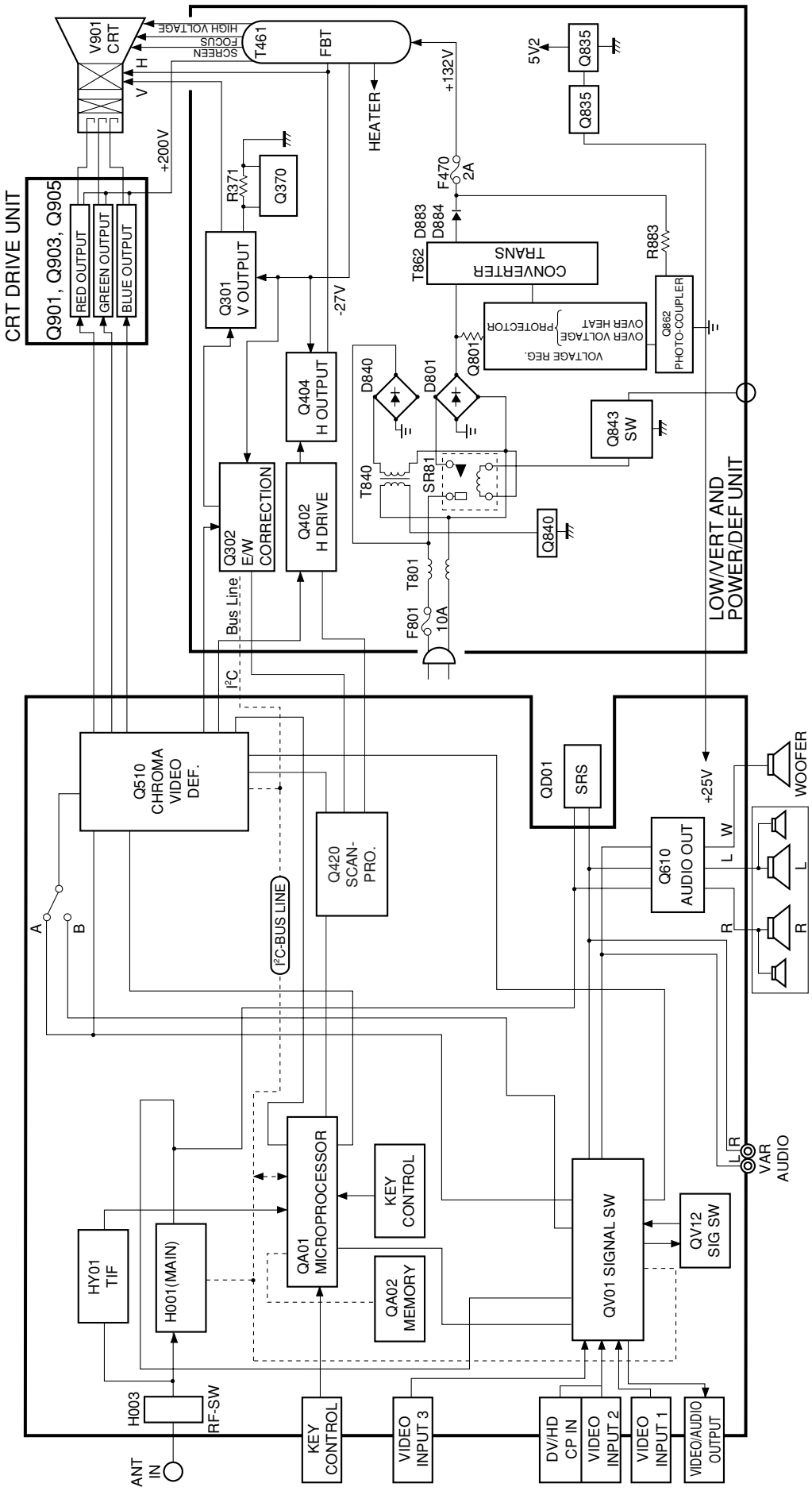
- CONTROL Circuit 24/25
- LED Circuit 25/25

CIRCUIT BLOCK DIAGRAM

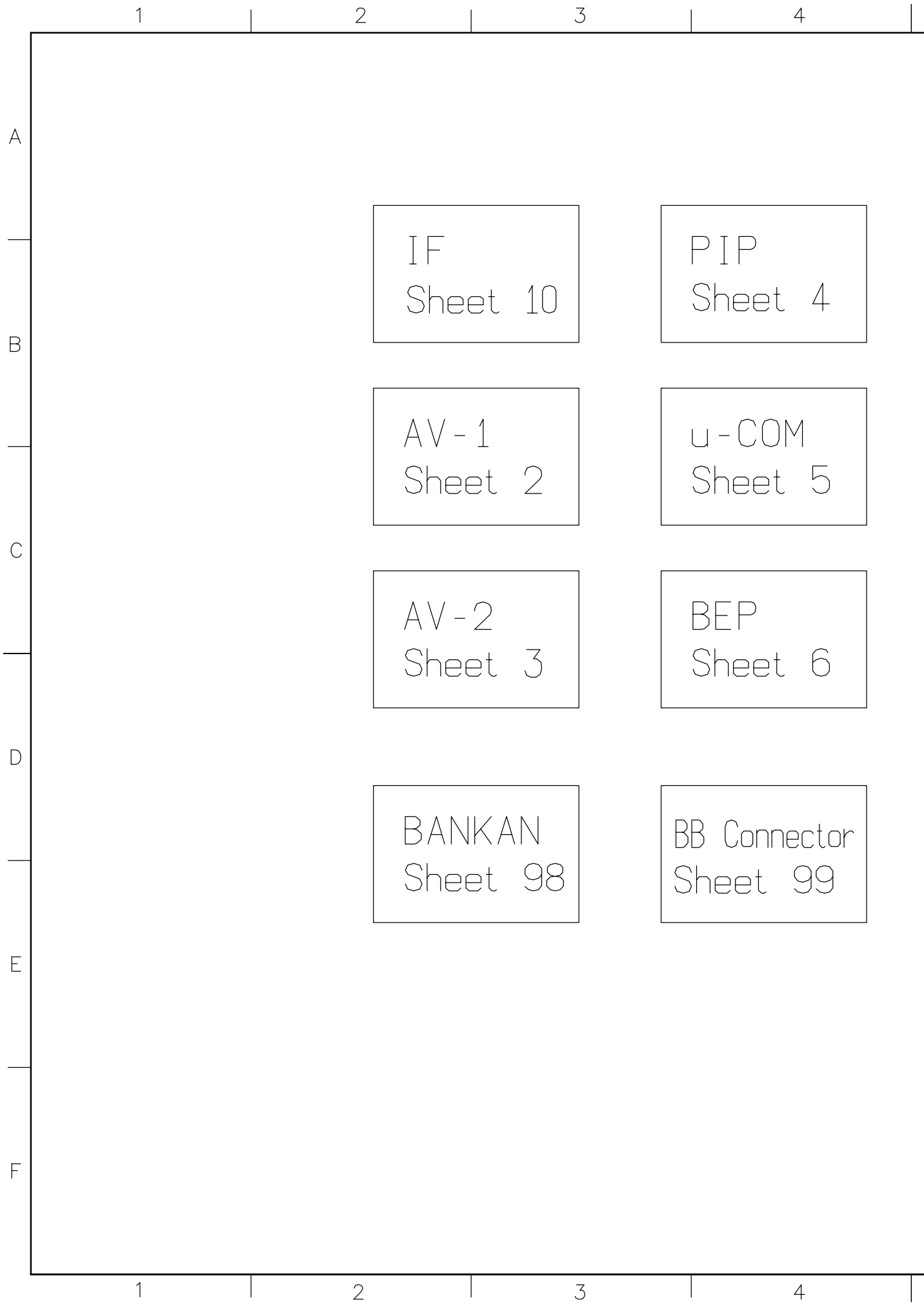


IF Sheet 10	PIP Sheet 4
AV-1 Sheet 2	u-COM Sheet 5
AV-2 Sheet 3	BEP Sheet 6

BEP-2 Sheet 7	
LowB REG Sheet 8	
AUDIO Sheet 9	

BANKAN Sheet 98	BB Connector Sheet 99

34HF83
SIGNAL - Sheet assignment
[SHEET-1]


1
2
3
4
A
B
C
D
E
F
IF
Sheet 10
PIP
Sheet 4
AV-1
Sheet 2
u-COM
Sheet 5
AV-2
Sheet 3
BEP
Sheet 6
BANKAN
Sheet 98
BB Connector
Sheet 99

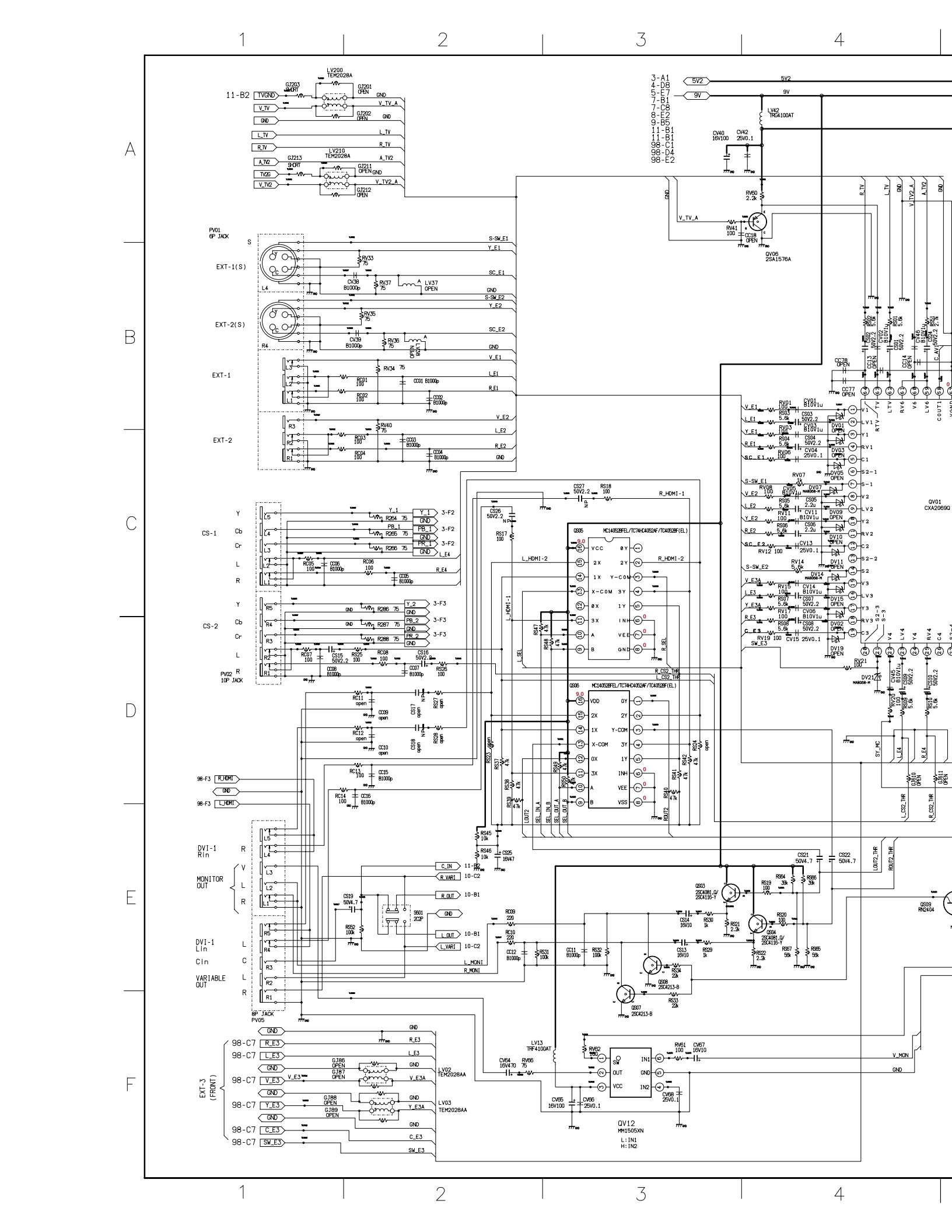
BEP-2
Sheet 7

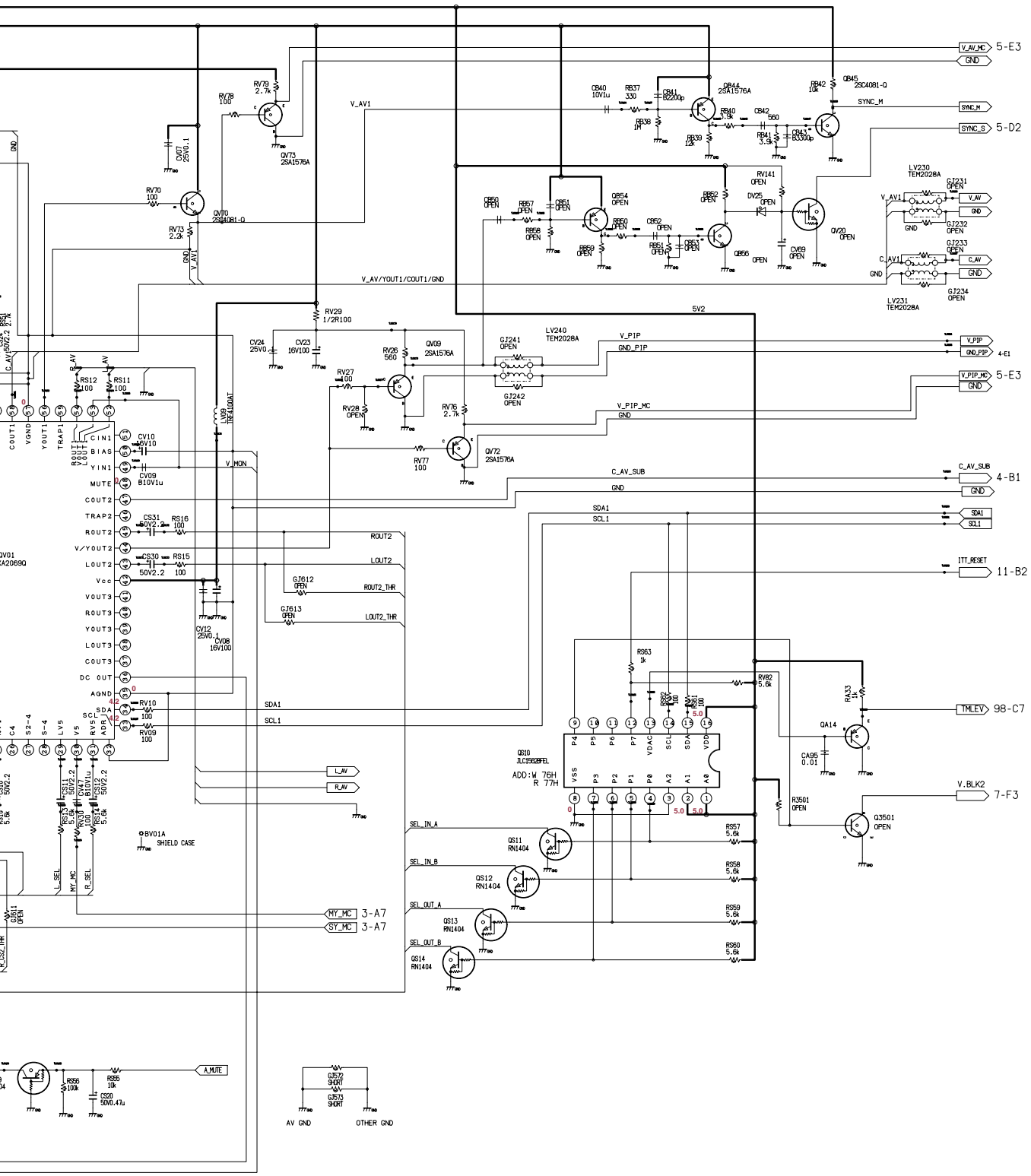
LowB REG
Sheet 8

AUDIO
Sheet 9

34HF83
SIGNAL - Sheet assignment
[SHEET-1]

34HF83
SIGNAL - AV-1
[SHEET-2]


LV200 TEM2028A
LV210 TEM2028A
LV13 TRF4100AT
LV42 TRG4100AT
PV01 6P JACK
EXT-1(S)
EXT-2(S)
EXT-1
EXT-2
PV02 10P JACK
CS-1
CS-2
DVI-1 RIn
MONITOR OUT
DVI-1 LIn
VARIABLE OUT
8P JACK PV05
EXT-3 (FRONT)
QV01 CXA2069Q
QV06 2SA1576A
QV12 MM1505XN
L:IN1 H:IN2
MC14052BFEL/TC74HC4052AF/TC4052BF(EL)
QS03 2SC4081-O/ 2SC4116-Y
QS04 2SC4081-O/ 2SC4116-Y
QS07 2SC4213-B
QS08 2SC4213-B
QS09 RN2404
S601 2P2P
V_TV_A
R_HDMI-1
R_HDMI-2
L_HDMI-1
L_HDMI-2
R_CS2_THR
L_CS2_THR
LOUT2_THR
ROUT2_THR
R_MONI
L_MONI
V_MON
SY_MC

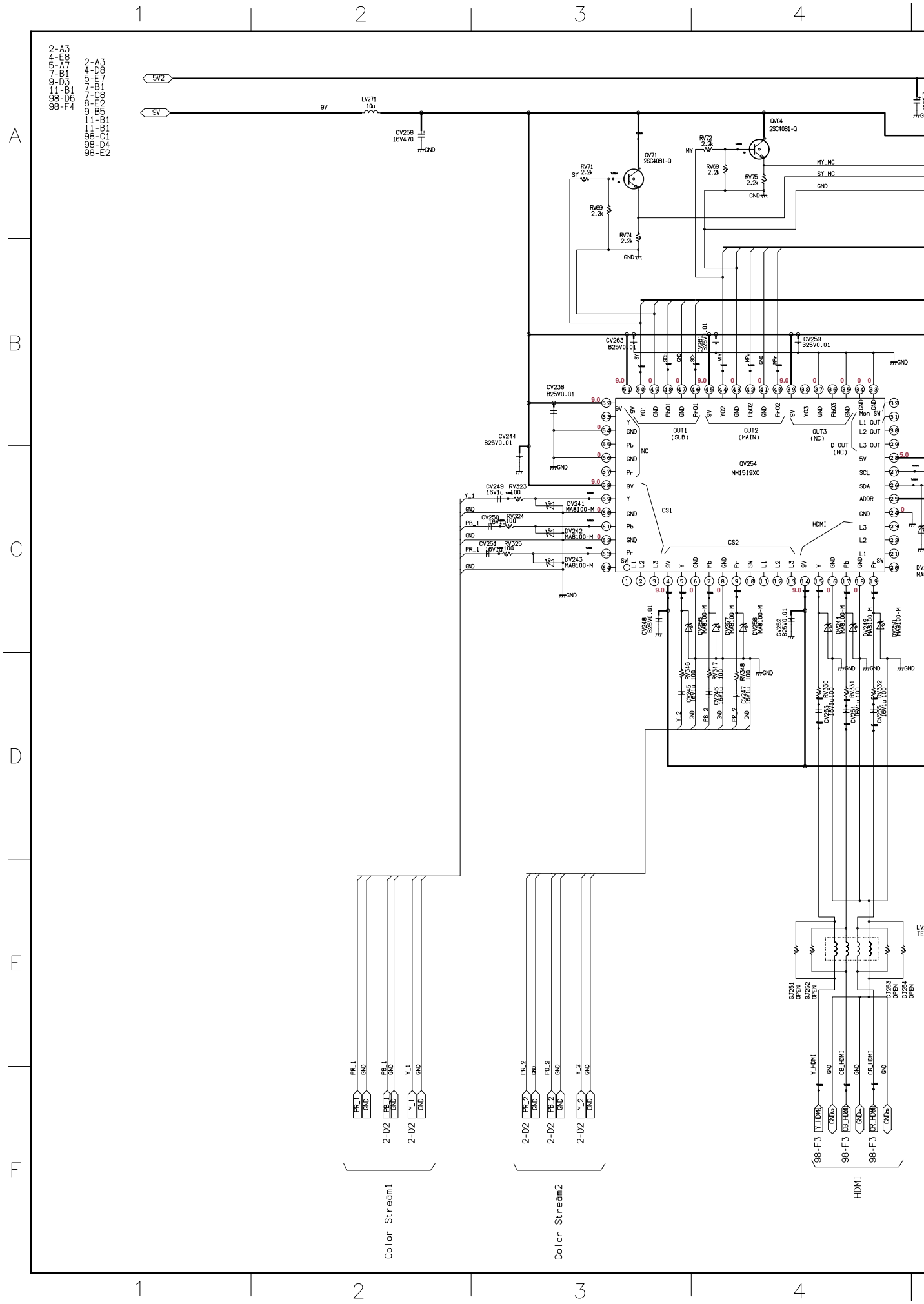


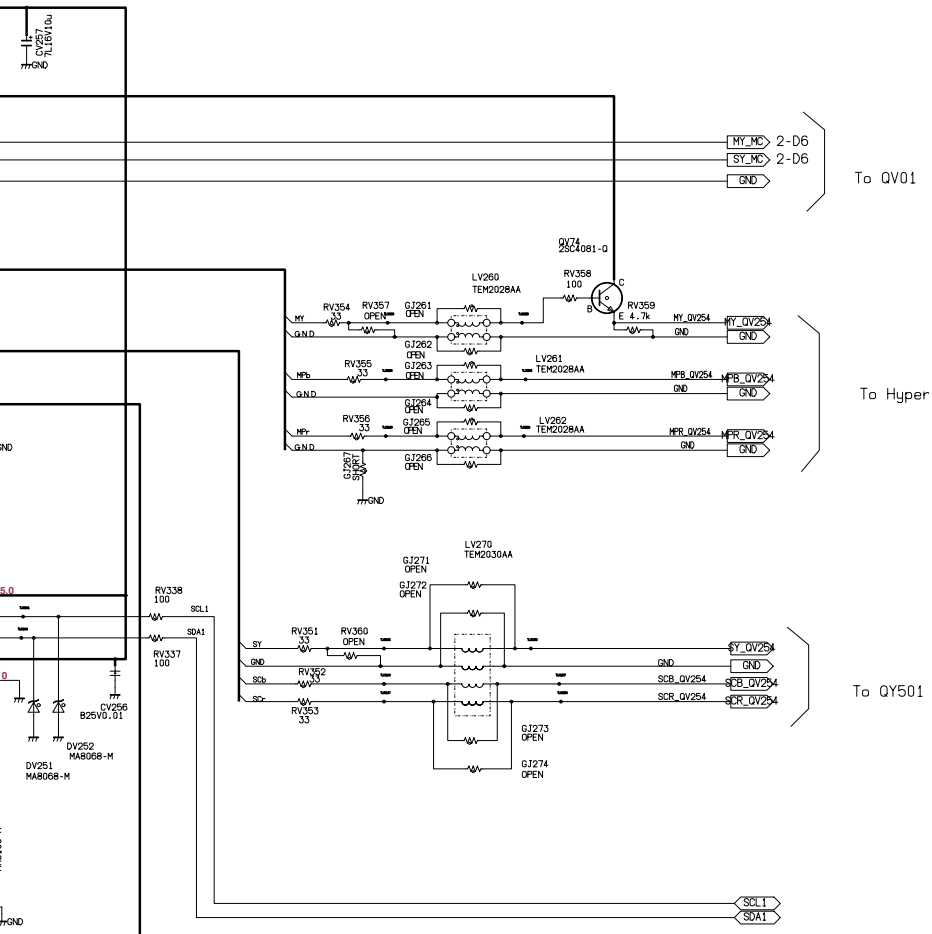
34HF83
SIGNAL - AV-1
[SHEET-2]

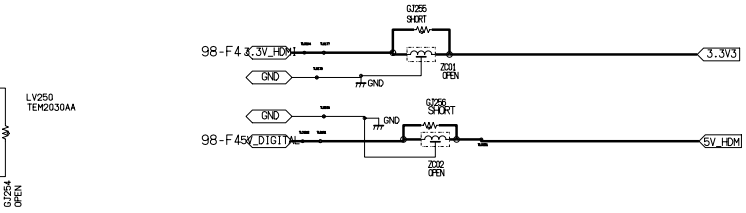
2-A3
4-E8
5-A7 2-A3
7-B1 4-D8
9-D3 5-E7
11-B1 7-B1
98-D6 7-C8
98-F4 8-F2
9-B5
11-B1
11-B1
98-C1
98-D4
98-E2

5V2
9V
LV271 10u
CV258 16V470
GND
CV2510u
QV04 2SC4081-Q
QV71 2SC4081-Q
RV72 2.2k
RV68 2.2k
RV75 2.2k
RV71 2.2k
RV69 2.2k
RV74 2.2k
MY_MC
SY_MC
MY_MC 2-D6
SY_MC 2-D6
To QV01
QV74 2SC4081-Q
LV260 TEM2028AA
RV358 100
RV359 E 4.7k
RV354 33
RV357 OPEN
GJ261 OPEN
GJ262 OPEN
GJ263 OPEN
GJ264 OPEN
GJ265 OPEN
GJ266 OPEN
GJ267 SHORT
LV261 TEM2028AA
LV262 TEM2028AA
RV355 33
RV356 33
MY_QV254
MPB_QV254
MPR_QV254
To Hyper
LV270 TEM2030AA
GJ271 OPEN
GJ272 OPEN
RV351 33
RV360 OPEN
RV352 33
RV353 33
GJ273 OPEN
GJ274 OPEN
SY_QV254
SCB_QV254
SCR_QV254
To QY501
CV263 B25V0.01
CV259 B25V0.01
CV238 B25V0.01
CV244 B25V0.01
CV249 16V1u
RV323 100
CV250 16V1u
RV324 100
CV251 16V1u
RV325 100
QV254 MM1519XQ
OUT1 (SUB)
OUT2 (MAIN)
OUT3 (NC)
D OUT (NC)
CS1
CS2
HDMI
RV338 100
RV337 100
SCL1
SDA1
CV256 B25V0.01
DV241 MA8100-M
DV242 MA8100-M
DV243 MA8100-M
DV251 MA8068-M
DV252 MA8068-M
CV246 B25V0.01
CV247 B25V0.01
DV244 MA8100-M
DV245 MA8100-M
DV246 MA8100-M
DV247 MA8100-M
DV248 MA8100-M
DV249 MA8100-M
RV245 100
RV246 100
RV247 100
RV248 100
CV252 B25V0.01
CV253 B25V0.01
DV250 MA8100-M
DV251 MA8100-M
DV252 MA8100-M
DV253 MA8100-M
RV330 100
RV331 100
RV332 100
LV250 TEM2030AA
GJ251 OPEN
GJ252 OPEN
GJ253 OPEN
GJ254 OPEN
SCL1
SDA1
98-F4 3V_HDM
98-F4 5V_DIGITAL
GJ255 SHORT
GJ256 SHORT
ZU20 OPEN
ZU21 OPEN
3.3V3
5V_HDM
PR_1
PB_1
Y_1
PR_2
PB_2
Y_2
Y_HDMI
CB_HDMI
CR_HDMI
2-D2
98-F3
Color Stream1
Color Stream2
HDMI

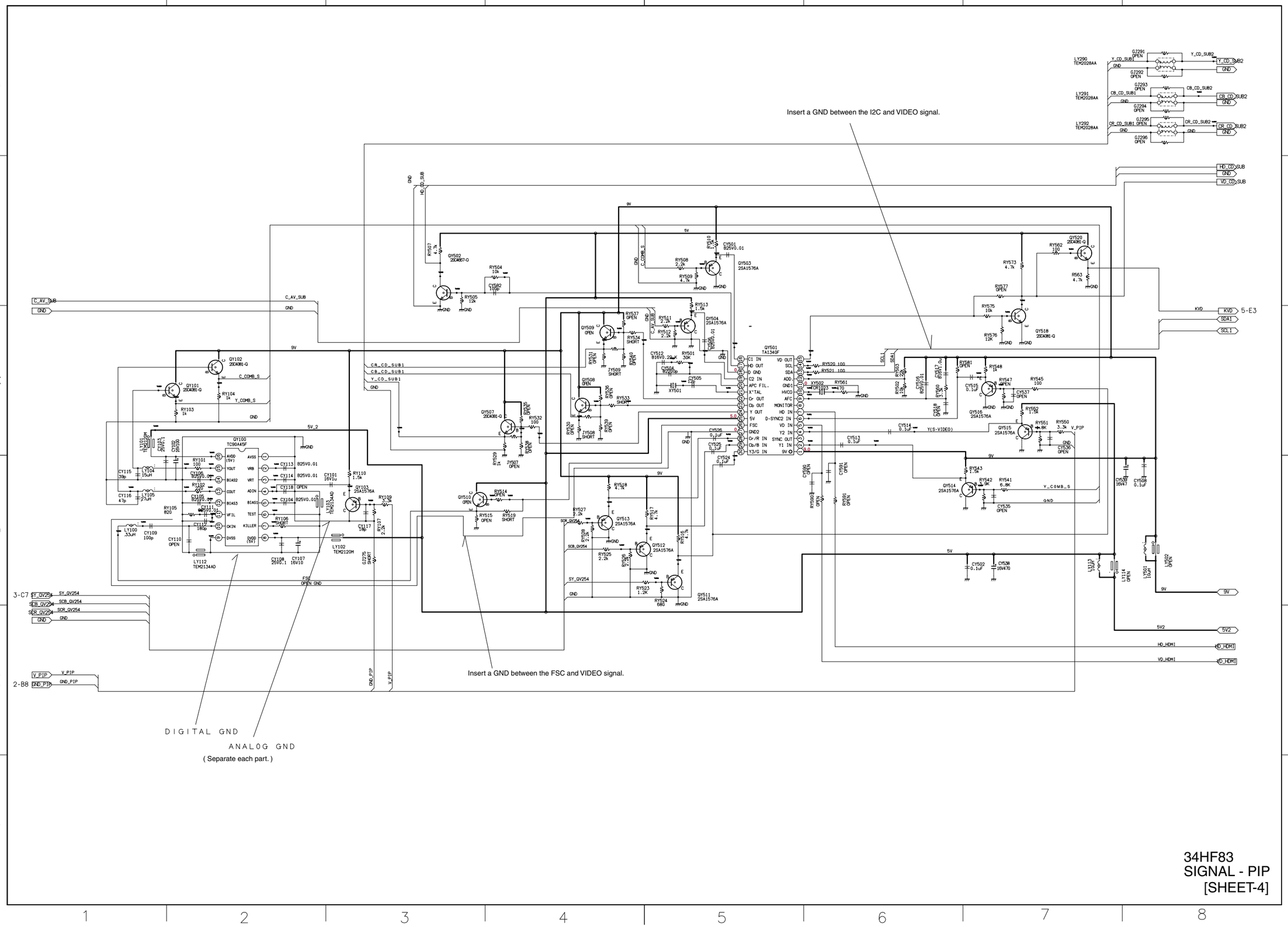
34HF83
SIGNAL - AV-2
[SHEET-3]

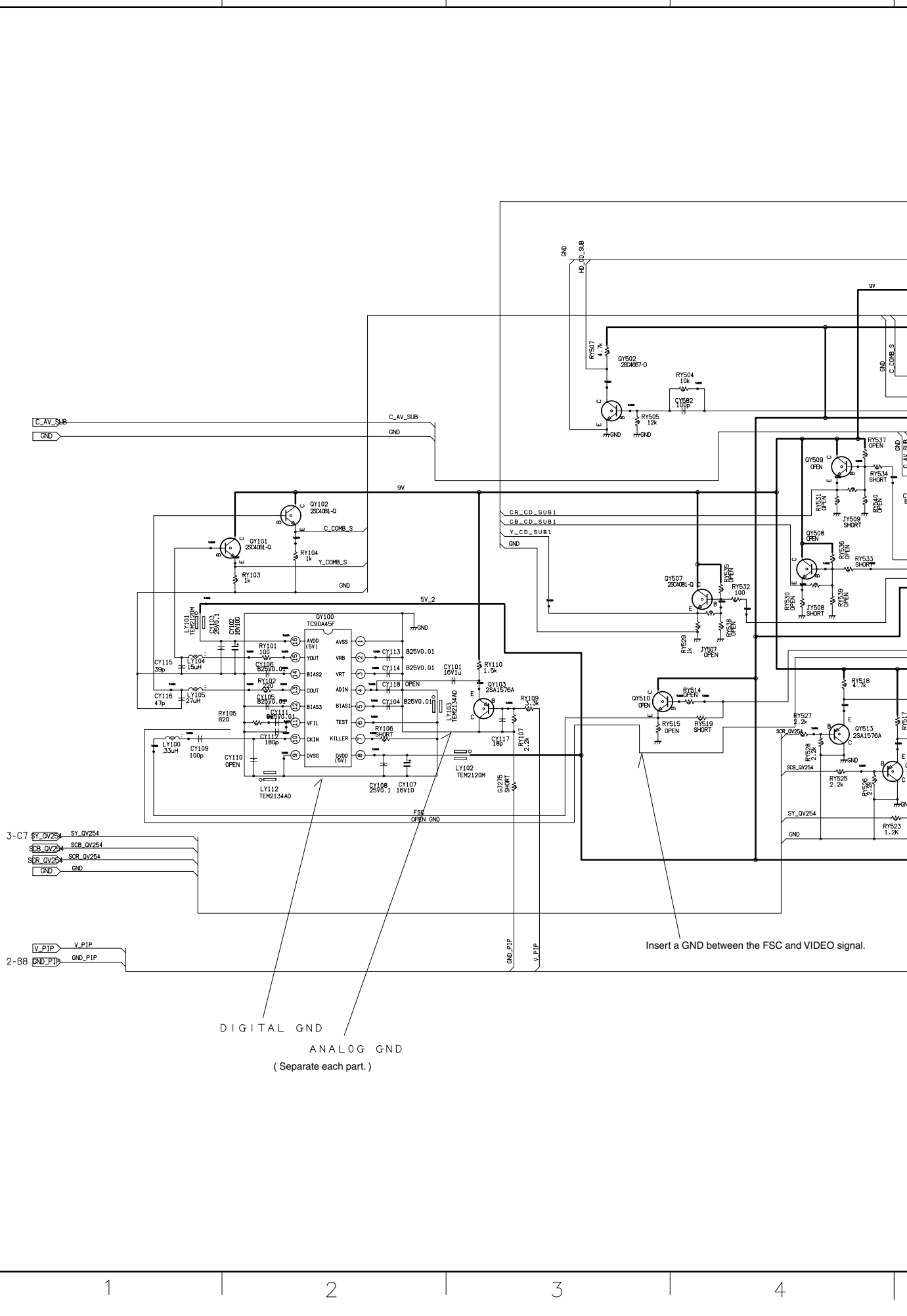

2-A3
4-E8
5-A7
7-B1
9-D3
11-B1
98-D6
98-F4
2-A3
4-D8
5-E7
7-B1
7-C8
8-E2
9-B5
11-B1
11-B1
98-C1
98-D4
98-E2
5V2
9V
LV271 10u
CV258 16V470
GND
QV04 2SC4081-Q
QV71 2SC4081-Q
RV72 2.2k
RV68 2.2k
RV75 2.2k
RV71 2.2k
RV69 2.2k
RV74 2.2k
MY_MC
SY_MC
CV263 B25V0.01
CV261 B25V0.01
CV259 B25V0.01
CV238 B25V0.01
CV244 B25V0.01
QV254 MM1519XQ
OUT1 (SUB)
OUT2 (MAIN)
OUT3 (NC)
D OUT (NC)
NC
CS1
CS2
HDMI
CV249 16V1u
RV323 100
CV250 16V1u
RV324 100
CV251 16V1u
RV325 100
DV241 MA8100-M
DV242 MA8100-M
DV243 MA8100-M
CV248 B25V0.01
CV252 B25V0.01
DV256 MA8100-M
DV257 MA8100-M
DV258 MA8100-M
DV244 MA8100-M
DV245 MA8100-M
DV246 MA8100-M
RV346 100
RV347 100
RV348 100
CV245 16V1u
CV246 16V1u
CV247 16V1u
RV330 100
RV331 100
RV332 100
CV253 16V1u
CV254 16V1u
CV255 16V1u
GJ251 OPEN
GJ252 OPEN
GJ253 OPEN
GJ254 OPEN
PR_1
PB_1
Y_1
PR_2
PB_2
Y_2
2-D2
Color Stream1
Color Stream2
Y_HDMI
CB_HDMI
CR_HDMI
98-F3
HDMI

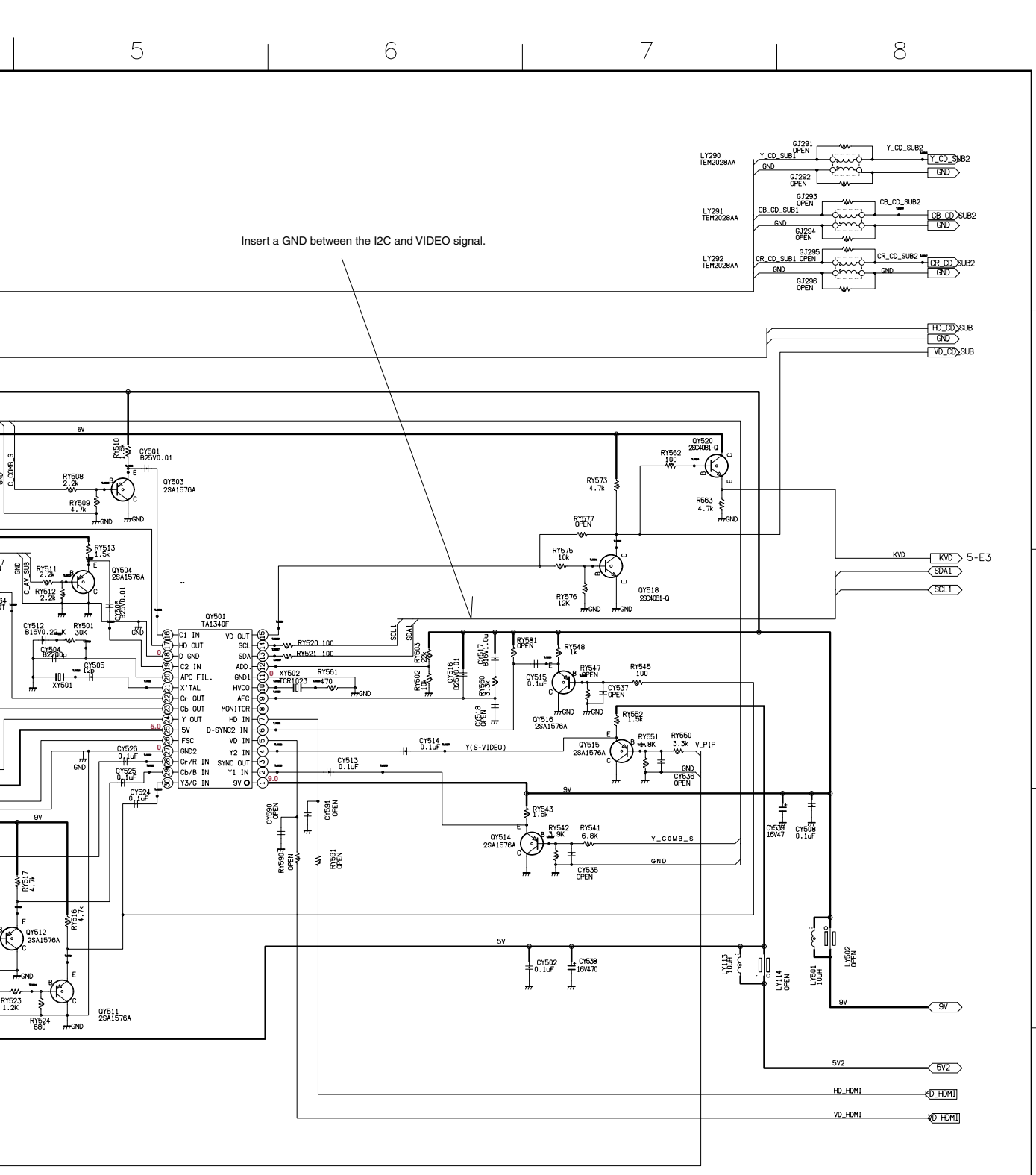




34HF83
SIGNAL - AV-2
[SHEET-3]

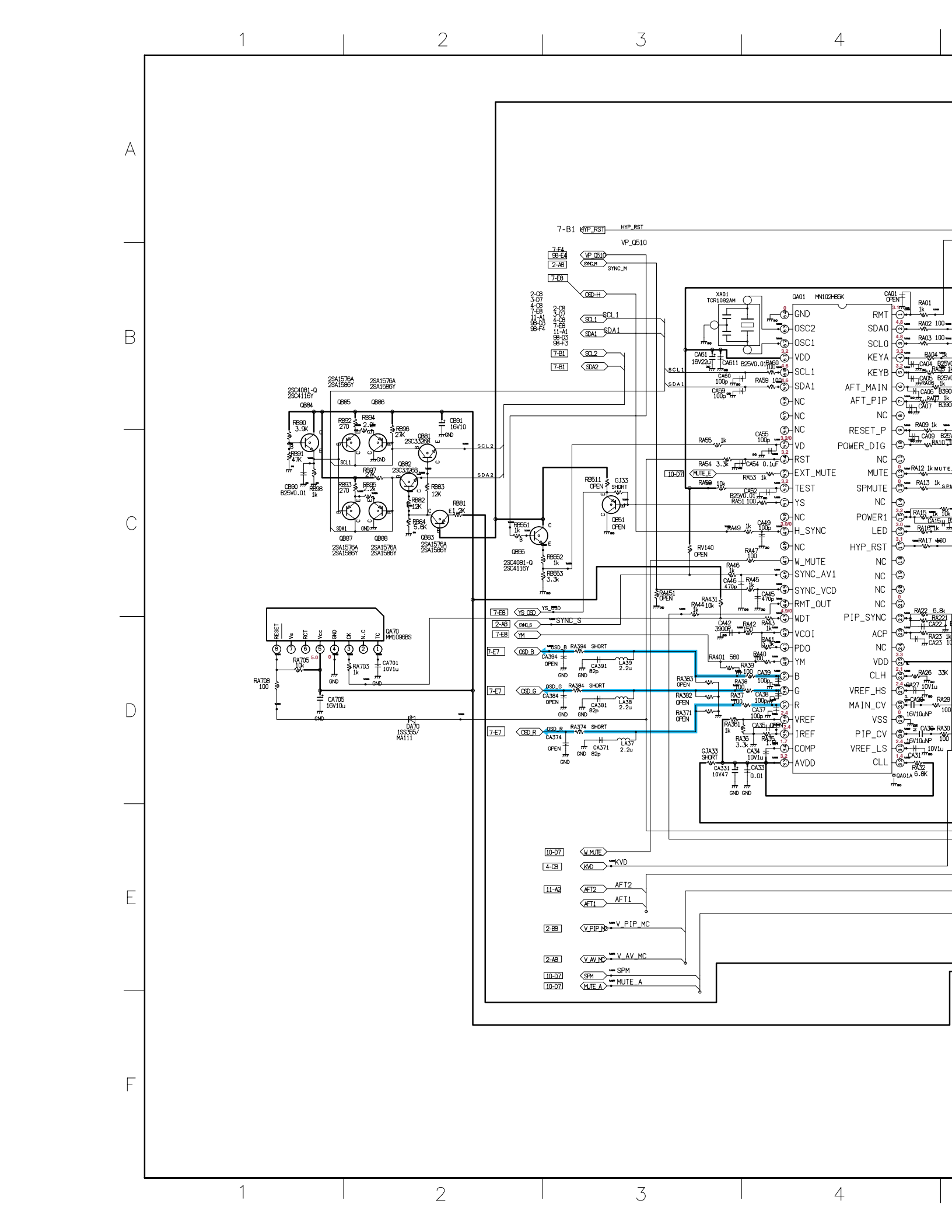

Insert a GND between the I2C and VIDEO signal.
Insert a GND between the FSC and VIDEO signal.
DIGITAL GND
ANAL0G GND
(Separate each part.)
34HF83
SIGNAL - PIP
[SHEET-4]

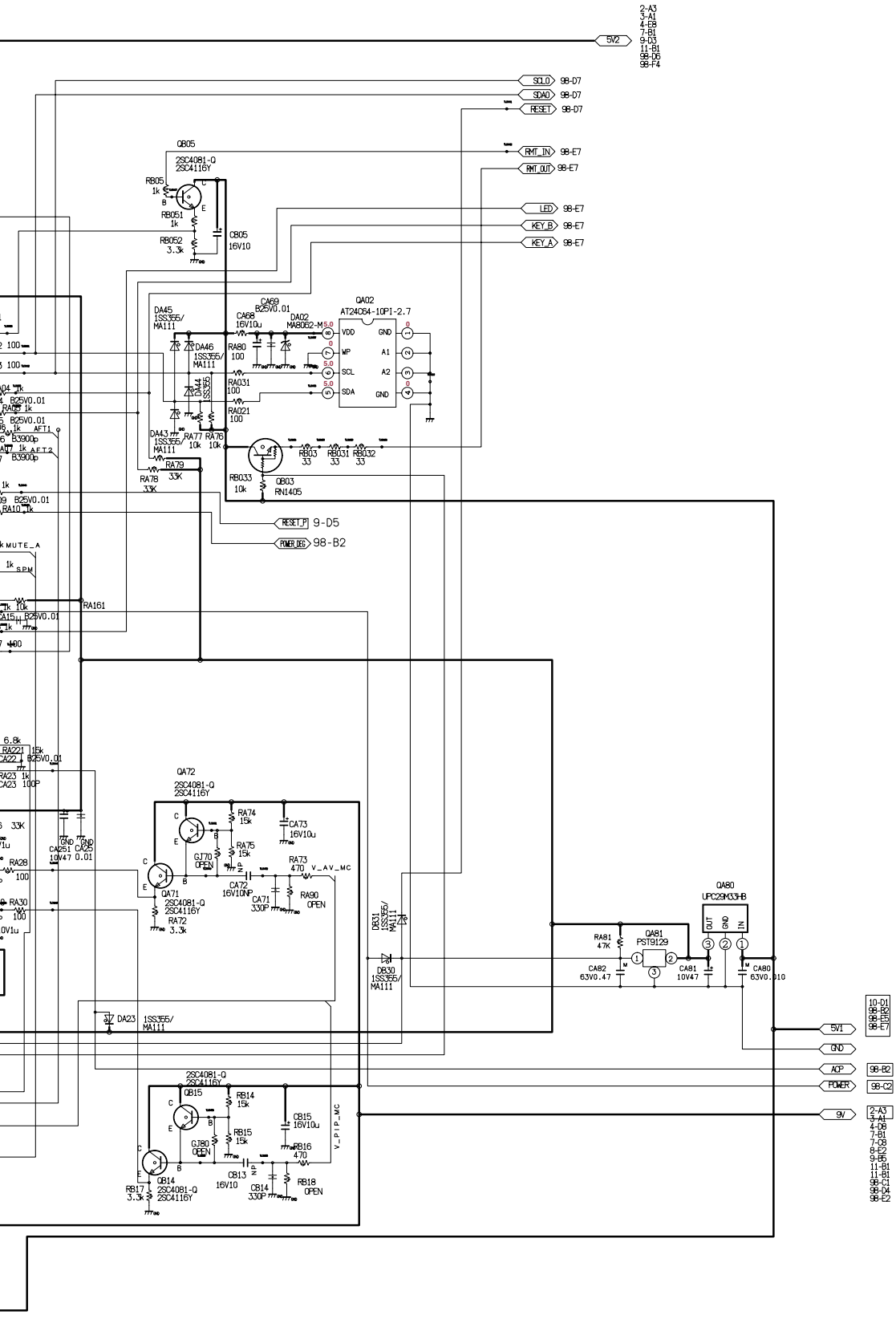

C_AV_SUB
GND
9V
5V_2
QY100 TC90A45F
QY101 2SC4081-Q
QY102 2SC4081-Q
QY103 2SA1576A
QY502 2SC4657-O
QY507 2SC4081-Q
QY509 OPEN
QY510 OPEN
RY101 100
RY102 100
RY103 1k
RY104 1k
RY105 820
RY106 SHORT
RY107 2.2k
RY109 1k
RY110 1.5k
RY504 10k
RY505 12k
RY507 4.7k
RY514 OPEN
RY515 OPEN
RY519 SHORT
RY527 2.2k
RY528 2.2k
RY525 2.2k
RY526 2.2k
RY523 1.2k
RY518 4.7k
RY529 1k
RY530 OPEN
RY531 OPEN
RY532 100
RY533 SHORT
RY534 SHORT
RY535 OPEN
RY536 OPEN
RY537 OPEN
RY538 OPEN
RY539 OPEN
CY101 16V1u
CY102 25V0.1
CY103 25V0.1
CY104 B25V0.01
CY105 B25V0.01
CY106 B25V0.01
CY107 16V10
CY108 25V0.1
CY109 100p
CY110 OPEN
CY111 B25V0.01
CY112 180p
CY113 B25V0.01
CY114 B25V0.01
CY115 39p
CY116 47p
CY117 18p
CY118 OPEN
CY582 100p
LY100 33uH
LY101 TEM2120M
LY102 TEM2120M
LY103 TEM2134A0
LY104 15uH
LY105 27uH
LY112 TEM2134AD
JY507 OPEN
JY508 SHORT
JY509 SHORT
GJ275 SHORT
FSC OPEN GND
C_COMB_S
Y_COMB_S
CR_CD_SUB1
CB_CD_SUB1
Y_CD_SUB1
HD_SD_SUB
SY_OV254
SCB_OV254
SCR_OV254
V_PIP
GND_PIP
3-C7
2-B8
AVDD (5V)
YOUT
BIAS2
COUT
BIAS3
VFIL
CKIN
DVSS
AVSS
VRB
VRT
ADIN
BIAS1
TEST
KILLER
DVDD (5V)
DIGITAL GND
ANALOG GND
(Separate each part.)
Insert a GND between the FSC and VIDEO signal.



34HF83
SIGNAL - PIP
[SHEET-4]

34HF83
SIGNAL - Maicon
[SHEET-5]


7-B1 HYP_RST
HYP_RST
VP_Q510
SYNC_M
OSD-H
SCL1
SDA1
SCL2
SDA2
XA01 TCR1082AM
QA01 MN102H85K
GND
OSC2
OSC1
VDD
SCL1
SDA1
NC
NC
NC
VD
RST
EXT_MUTE
TEST
YS
NC
H_SYNC
NC
W_MUTE
SYNC_AV1
SYNC_VCD
RMT_OUT
WDT
VCOI
PDO
YM
B
G
R
VREF
IREF
COMP
AVDD
RMT
SDA0
SCL0
KEYA
KEYB
AFT_MAIN
AFT_PIP
NC
RESET_P
POWER_DIG
NC
MUTE
SPMUTE
NC
POWER1
LED
HYP_RST
NC
NC
NC
NC
PIP_SYNC
ACP
NC
VDD
CLH
VREF_HS
MAIN_CV
VSS
PIP_CV
VREF_LS
CLL
QA70 MM1096BS
RESET
Vs
RCT
Vcc
GND
CK
N.C
TC
YS_OSD
SYNC_S
YM
OSD_B
OSD_G
OSD_R
SHORT
OPEN
W_MUTE
KVD
AFT2
AFT1
V_PIP_MC
V_AV_MC
SPM
MUTE_A
2SC4081-Q
2SC4116Y
2SA1576A
2SA1586Y
2SC3326B
MUTE_E
B25V0.01

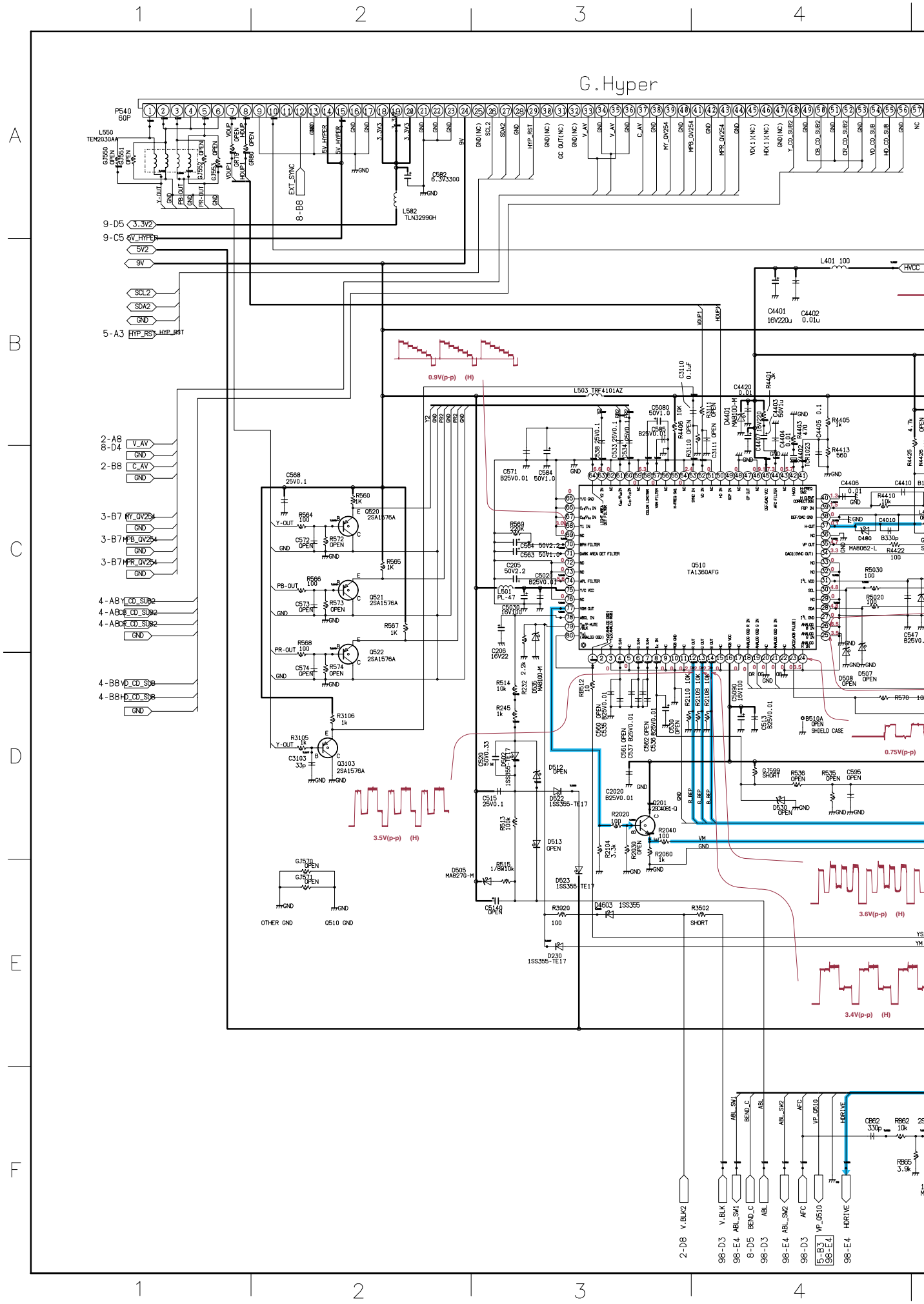


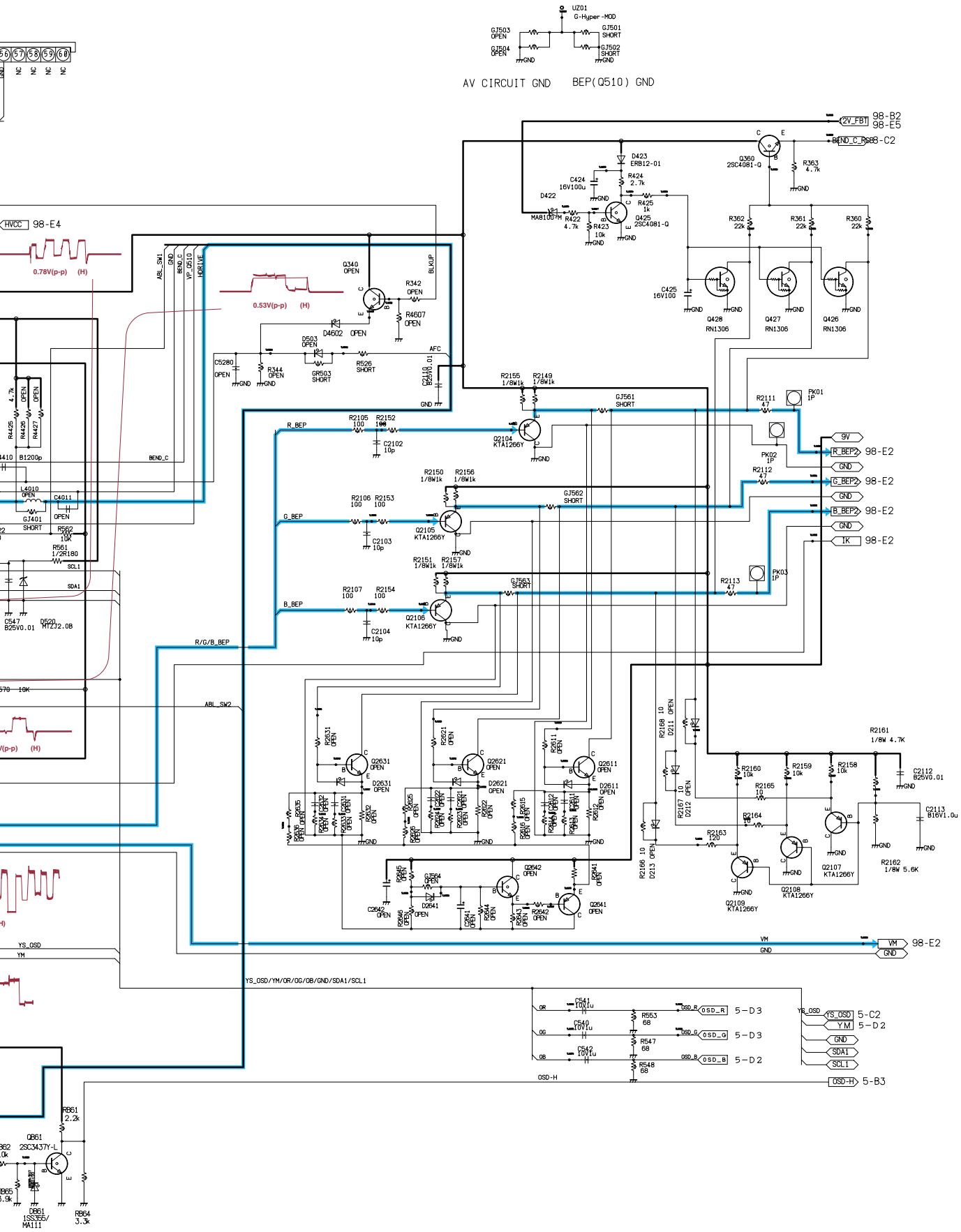
34HF83
SIGNAL - Maicon
[SHEET-5]

G.Hyper

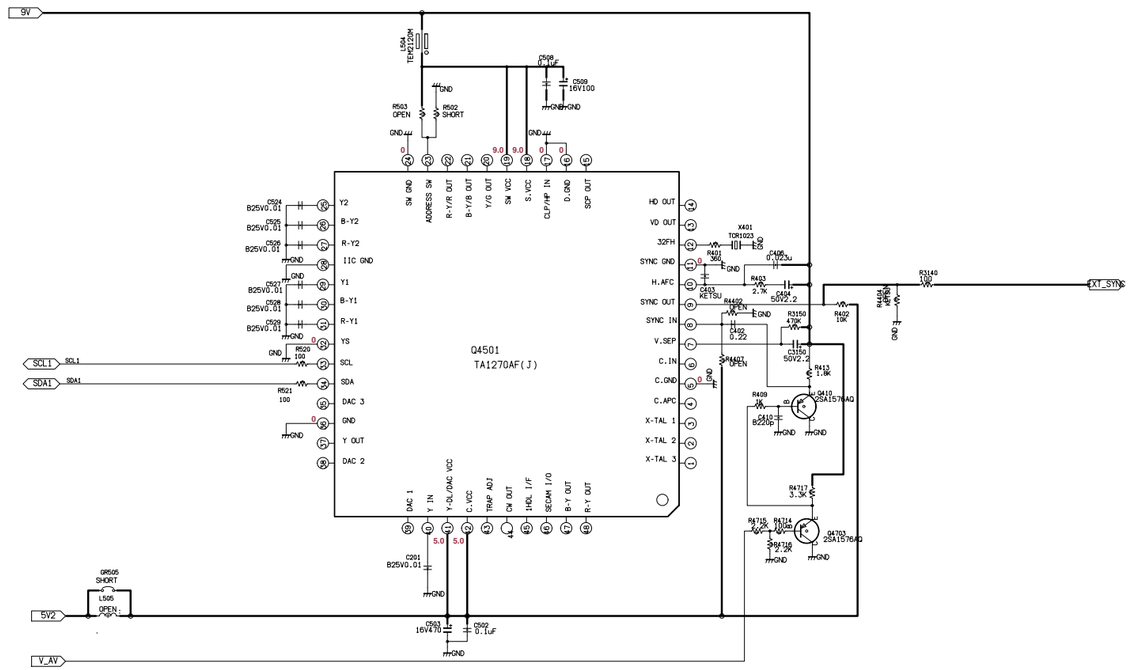
AV CIRCUIT GND BEP(Q510) GND

34HF83
SIGNAL - BEP
[SHEET-6]

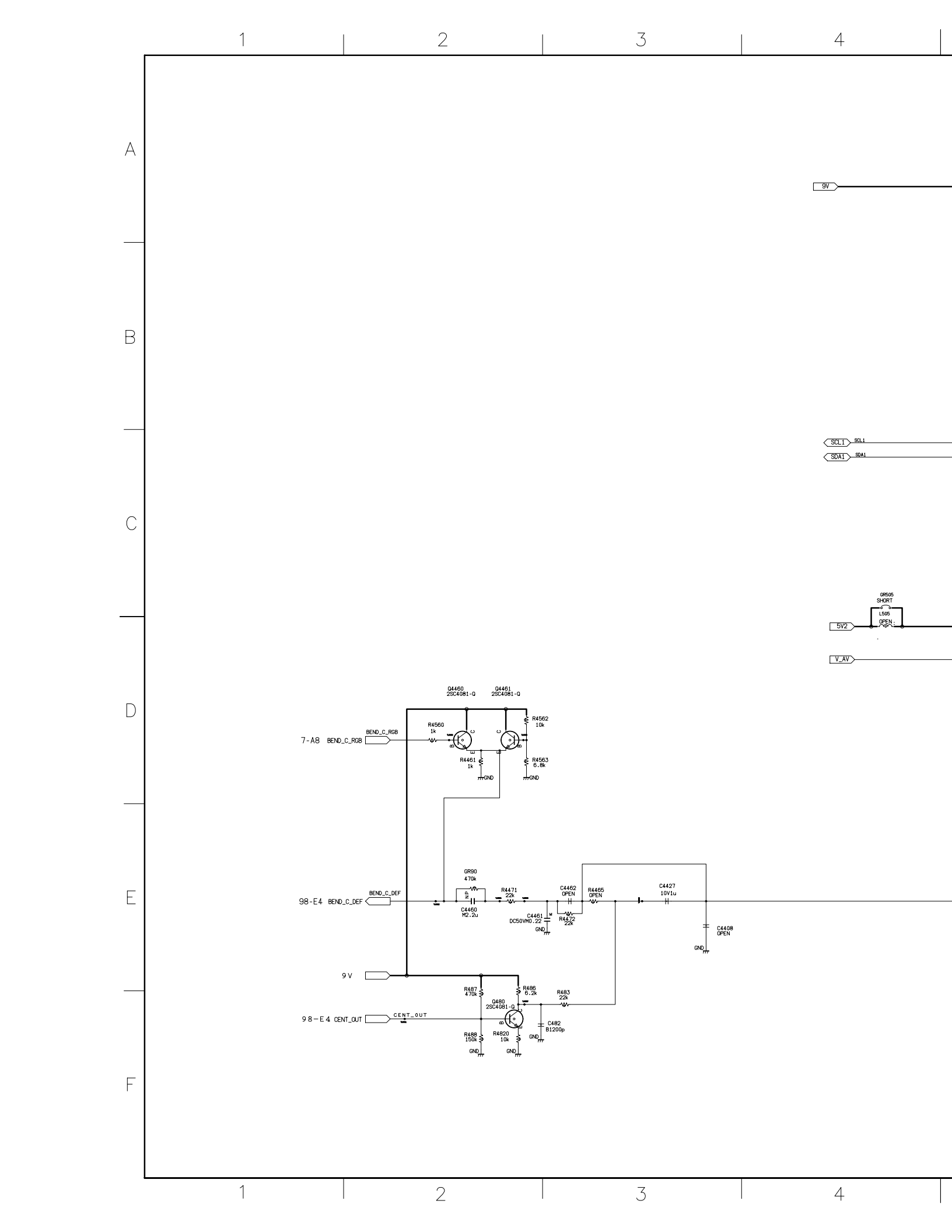

G.Hyper
P540 60P
L550 TEM2030AA
EXT_SYNC
8-B8
L582 TLN3299GH
C582 6.3V3300
9-D5 3.3V2
9-C5 5V_HYPER
5V2
9V
SCL2
SDA2
GND
5-A3 HYP_RST HYP_RST
2-A8 V_AV
8-D4 GND
2-B8 C_AV
GND
3-B7 MY_QV254
GND
3-B7 MPB_QV254
GND
3-B7 MPR_QV254
GND
4-A8 Y_CD_SUB2
4-A8 CB_CD_SUB2
4-A8 CR_CD_SUB2
GND
4-B8 VD_CD_SUB
4-B8 HD_CD_SUB
GND
L503 TRF4101AZ
L401 100
HVCC
C4401 16V220u
C4402 0.01u
0.9V(p-p) (H)
0510 TA1360AFG
3.5V(p-p) (H)
0.75V(p-p)
3.6V(p-p) (H)
3.4V(p-p) (H)
OTHER GND
Q510 GND
2-D8 V.BLK2
98-D3 V.BLK
98-E4 ABL_SW1
8-D5 BEND_C
98-D3 ABL
98-E4 ABL_SW2
98-D3 AFC
5-B3 98-E4 VP_Q510
98-E4 HDRIVE

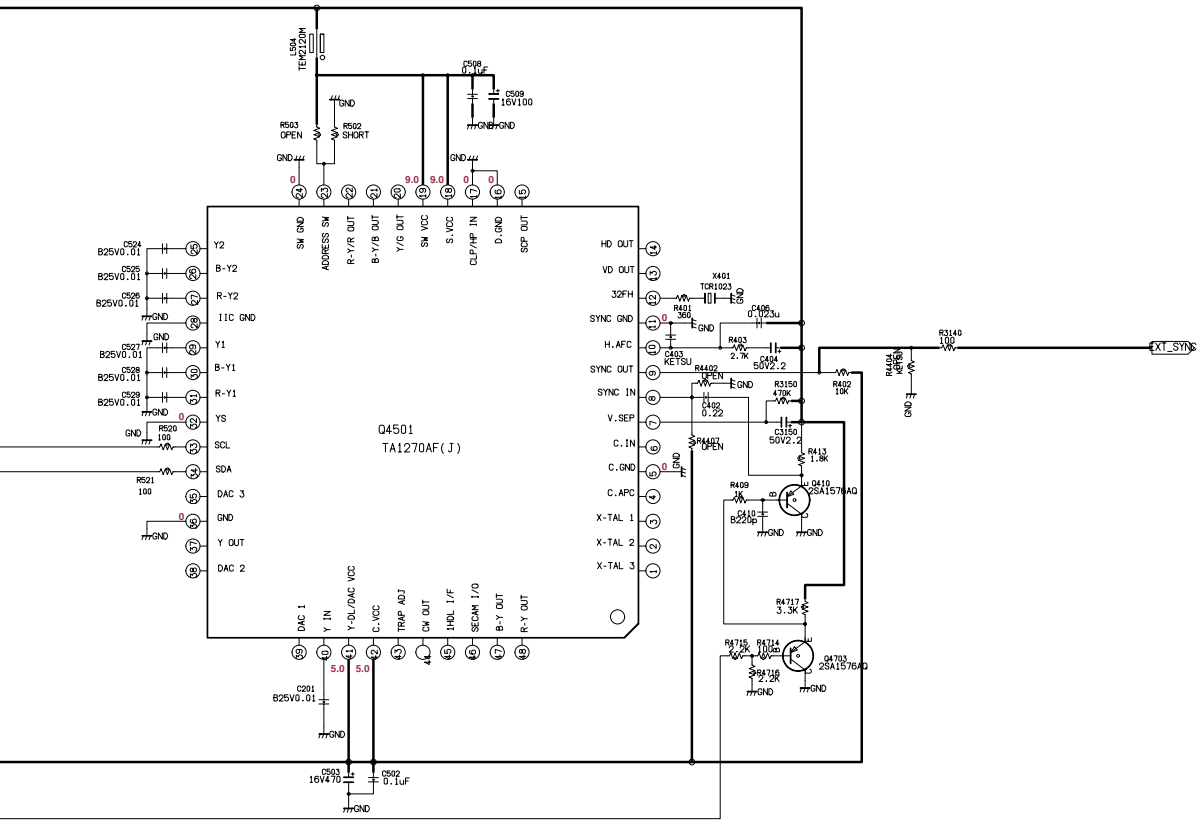


34HF83
SIGNAL - BEP
[SHEET-6]

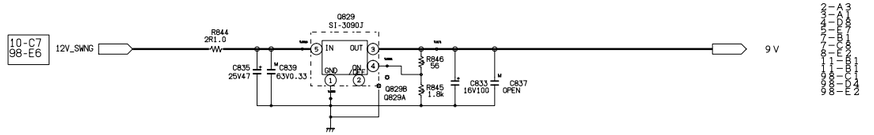


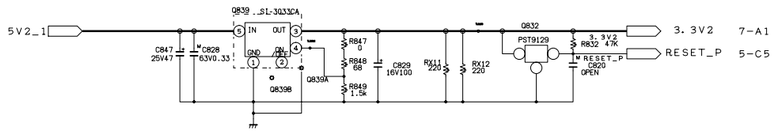
34HF83
SIGNAL - BEP2
[SHEET-7]

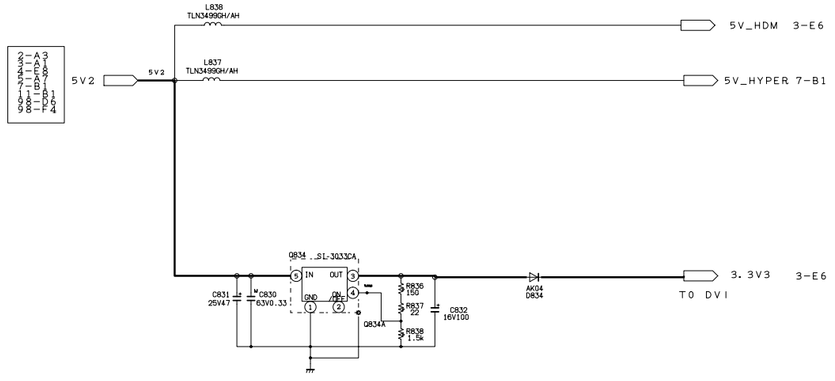

9V
SCL1
SDA1
GR505
SHORT
L505
OPEN
5V2
V_AV
Q4460
2SC4081-Q
Q4461
2SC4081-Q
R4562
10k
R4560
1k
BEND_C_RGB
7-A8 BEND_C_RGB
R4461
1k
R4563
6.8k
GND
GR90
470k
BEND_C_DEF
98-E4 BEND_C_DEF
R4471
22k
C4462
OPEN
R4465
OPEN
C4427
10V1u
C4460
M2.2u
C4461
DC50V M0.22
R4472
22k
C4408
OPEN
9V
R487
470k
R486
6.2k
R483
22k
Q480
2SC4081-Q
98-E4 CENT_OUT
CENT_OUT
C482
B1200p
R488
150k
R4820
10k



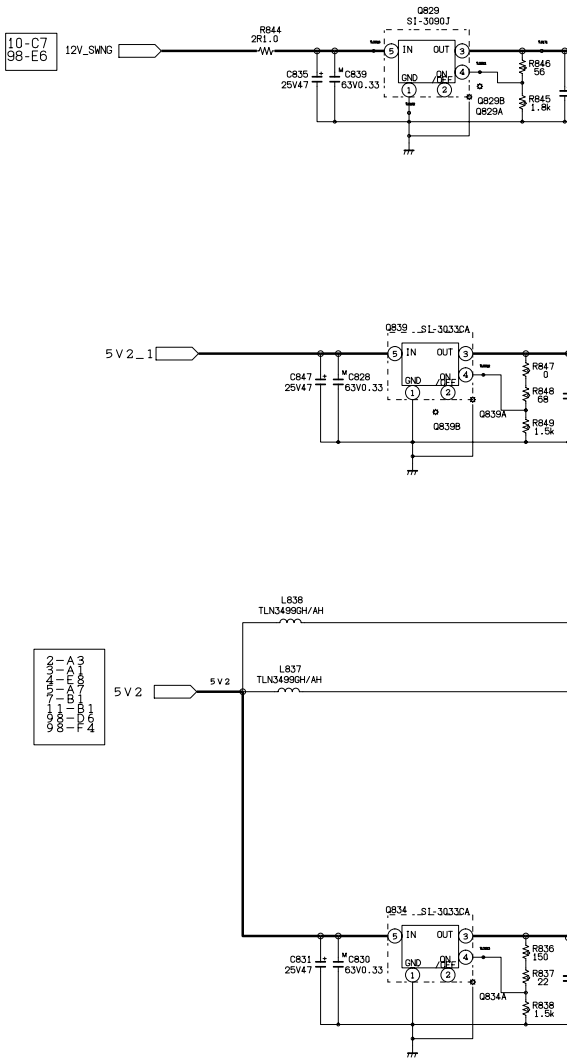
34HF83
SIGNAL - BEP2
[SHEET-7]

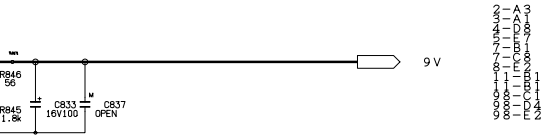


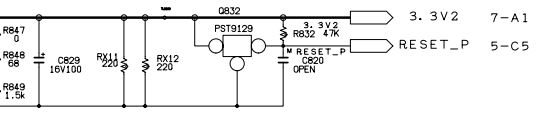


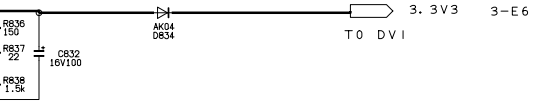


34HF83
SIGNAL - LOWB-REG
[SHEET-8]

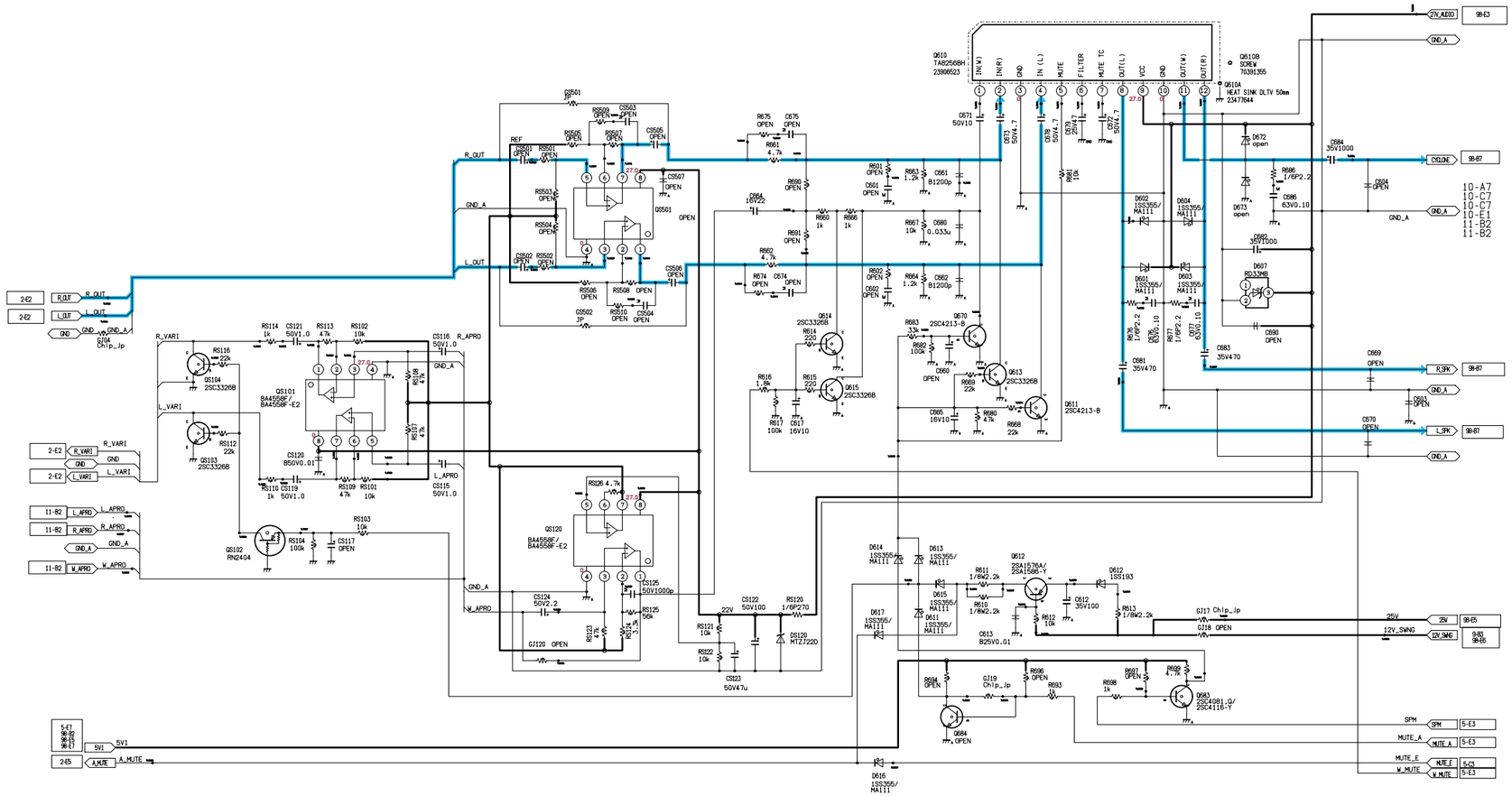

10-C7
98-E6
12V_SWNG
R844
2R1.0
C835
25V47
C839
63V0.33
Q829
S1-3090J
IN
OUT
GND
ON/OFF
Q829B
Q829A
R846
56
R845
1.8k
5V2_1
C847
25V47
C828
63V0.33
Q839 _S1-3Q33CA
Q839A
Q839B
R847
0
R848
68
R849
1.5k
L838
TLN3499GH/AH
L837
TLN3499GH/AH
2-A3
3-A1
4-E8
5-A7
7-B1
11-B1
68-D6
98-F4
5V2
5V2
C831
25V47
C830
63V0.33
Q834 _S1-3Q33CA
Q834A
R836
150
R837
22
R838
1.5k



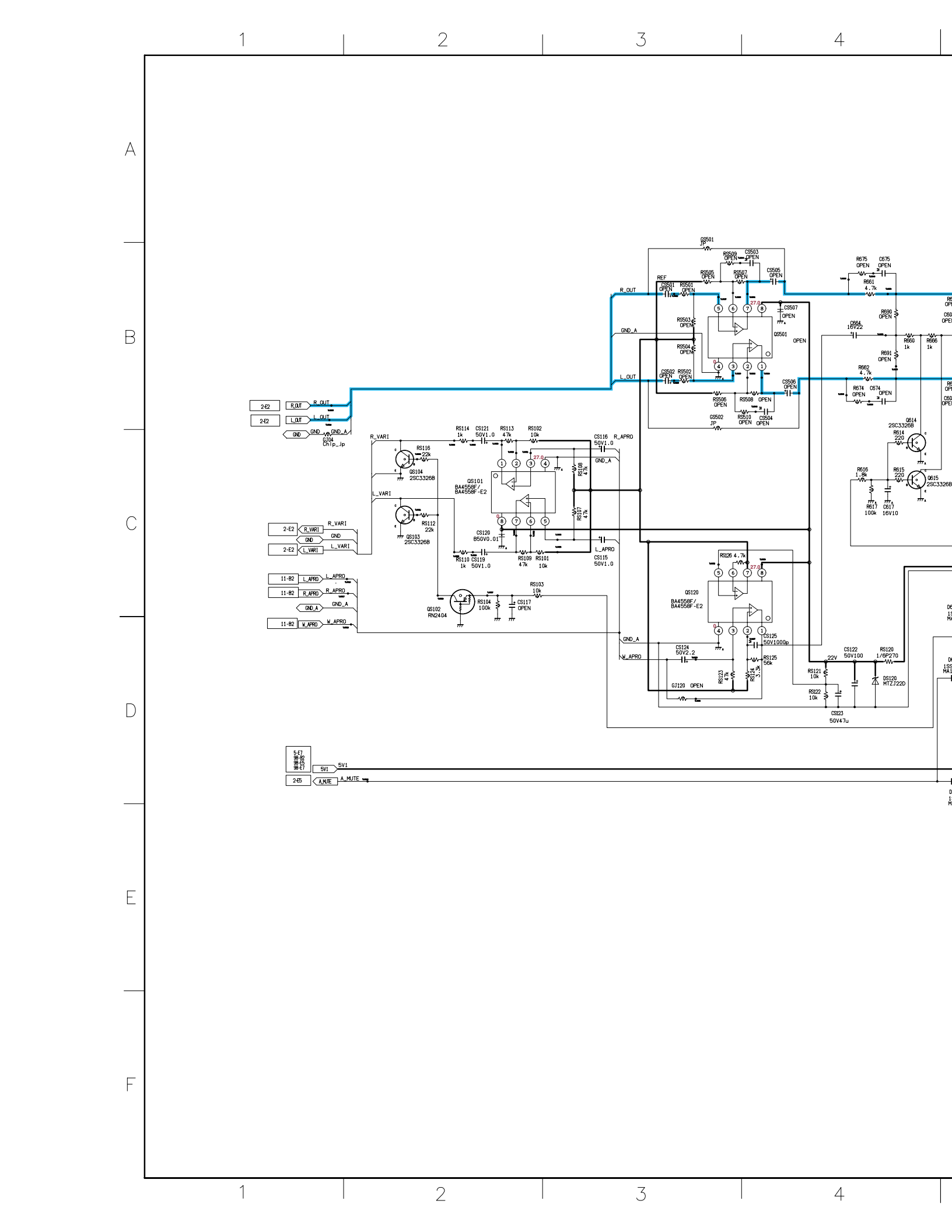


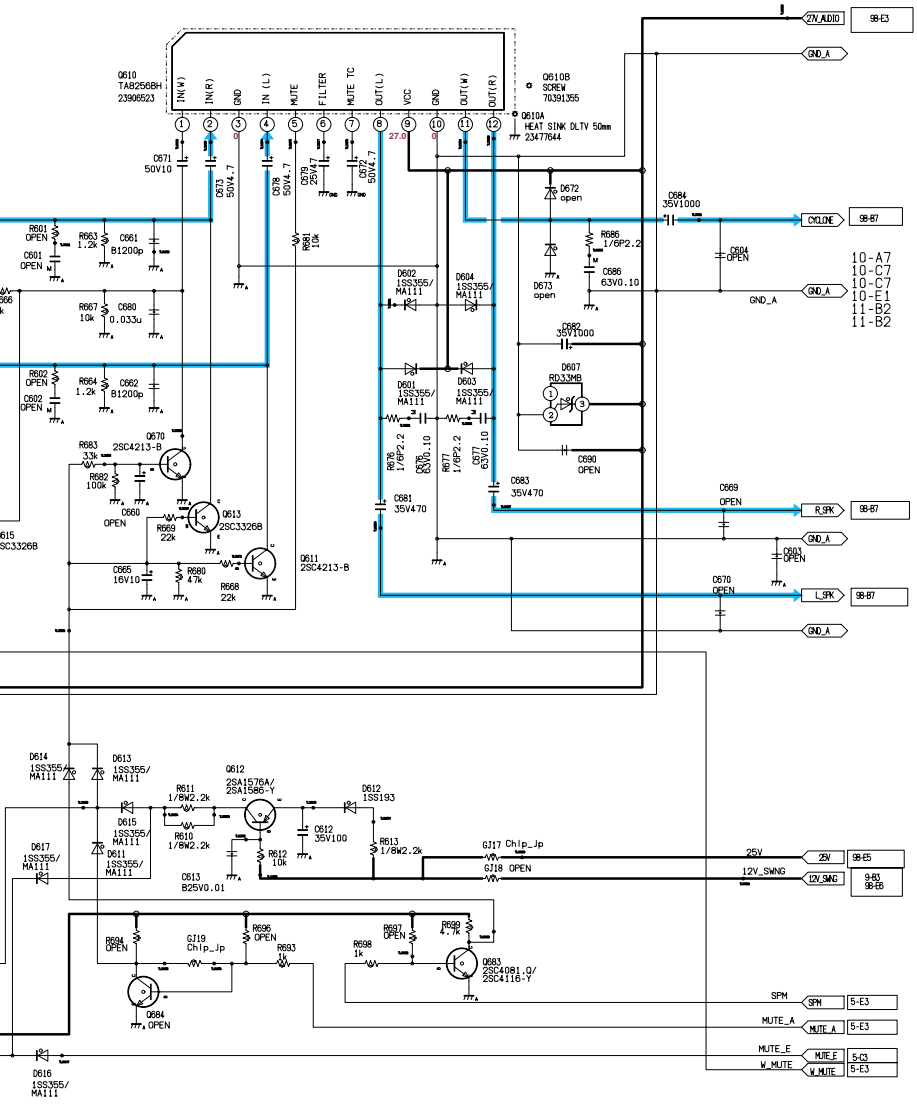


34HF83
SIGNAL - LOWB-REG
[SHEET-8]

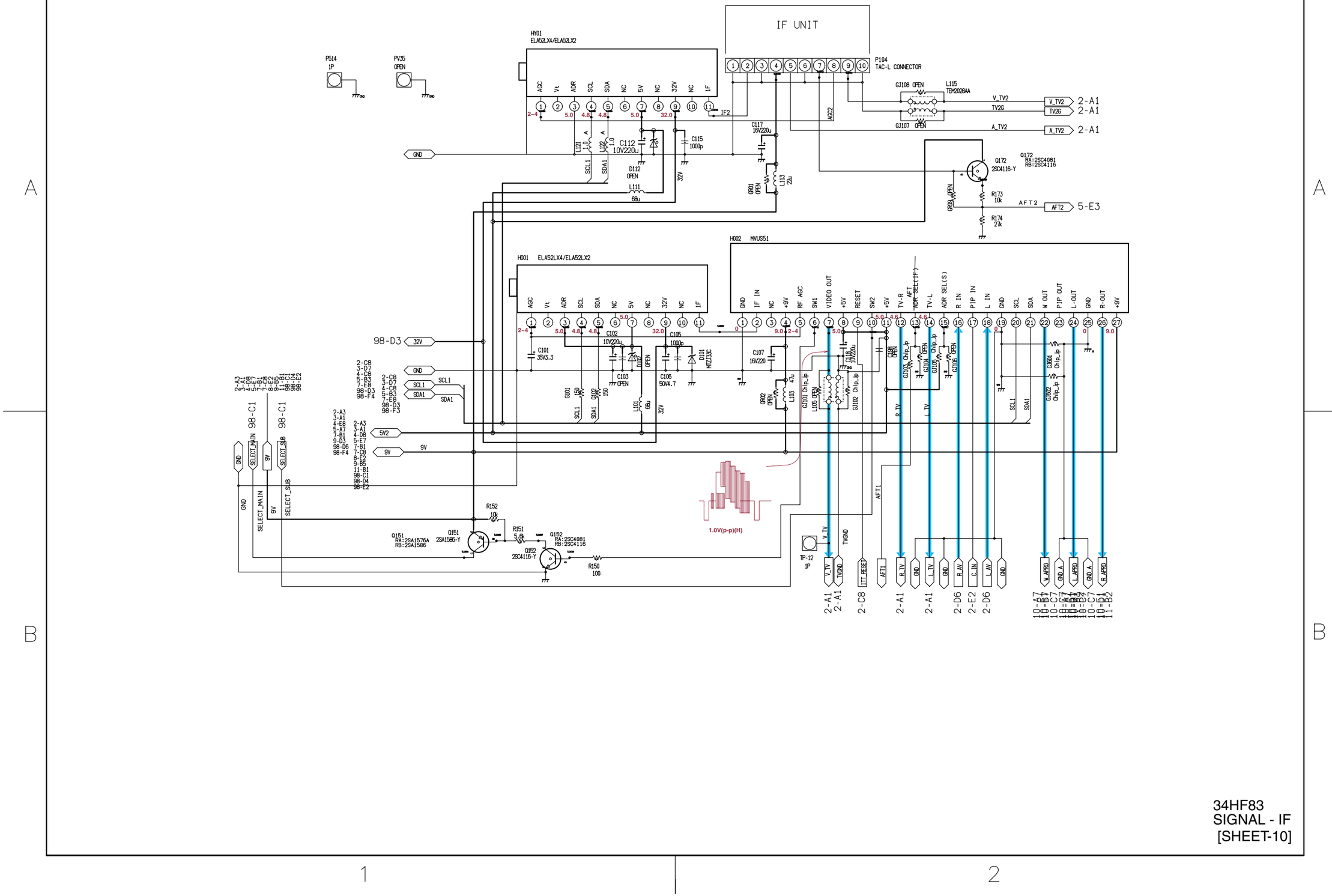


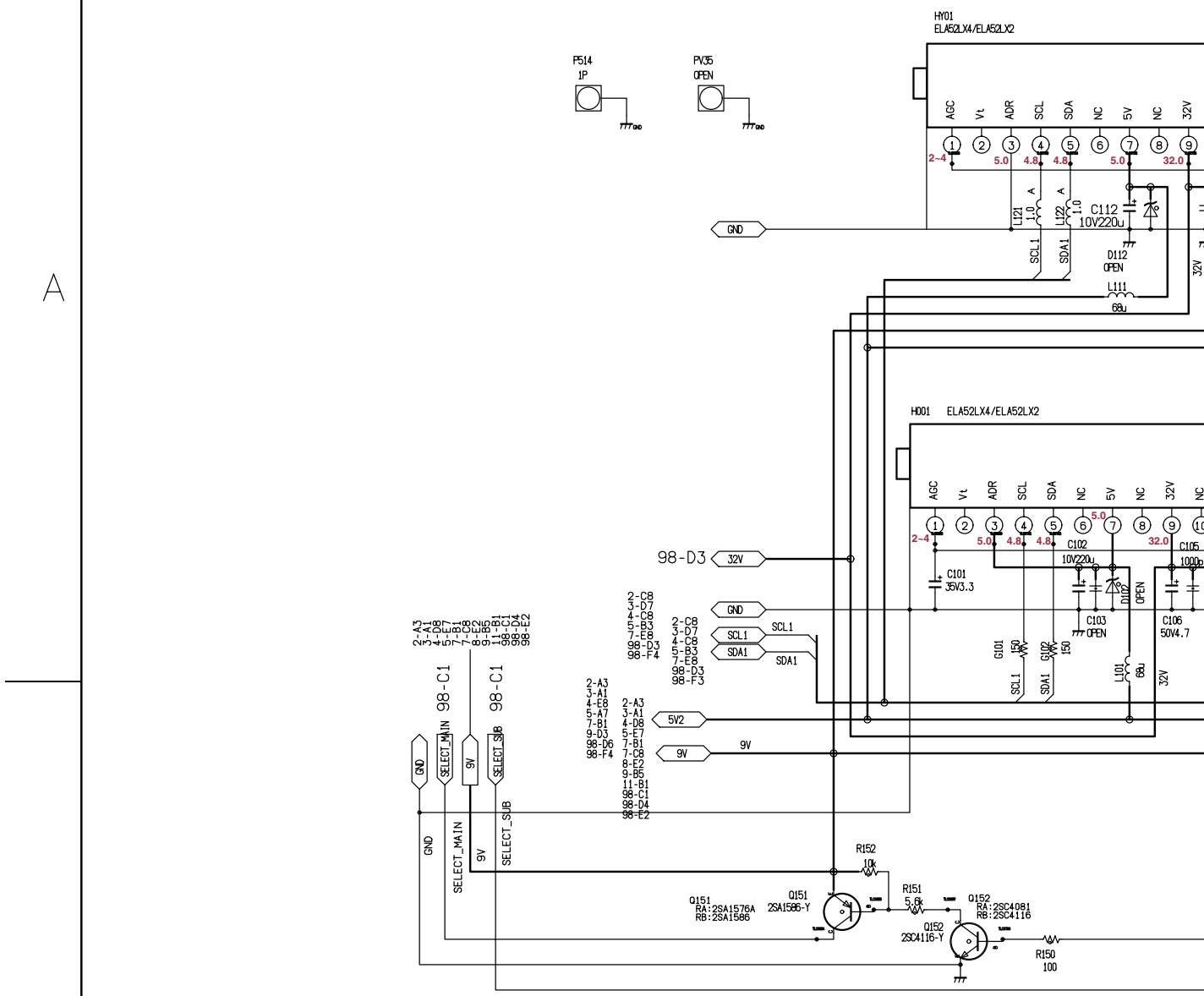
34HF83
SIGNAL - AUDIO OUT
[SHEET-9]

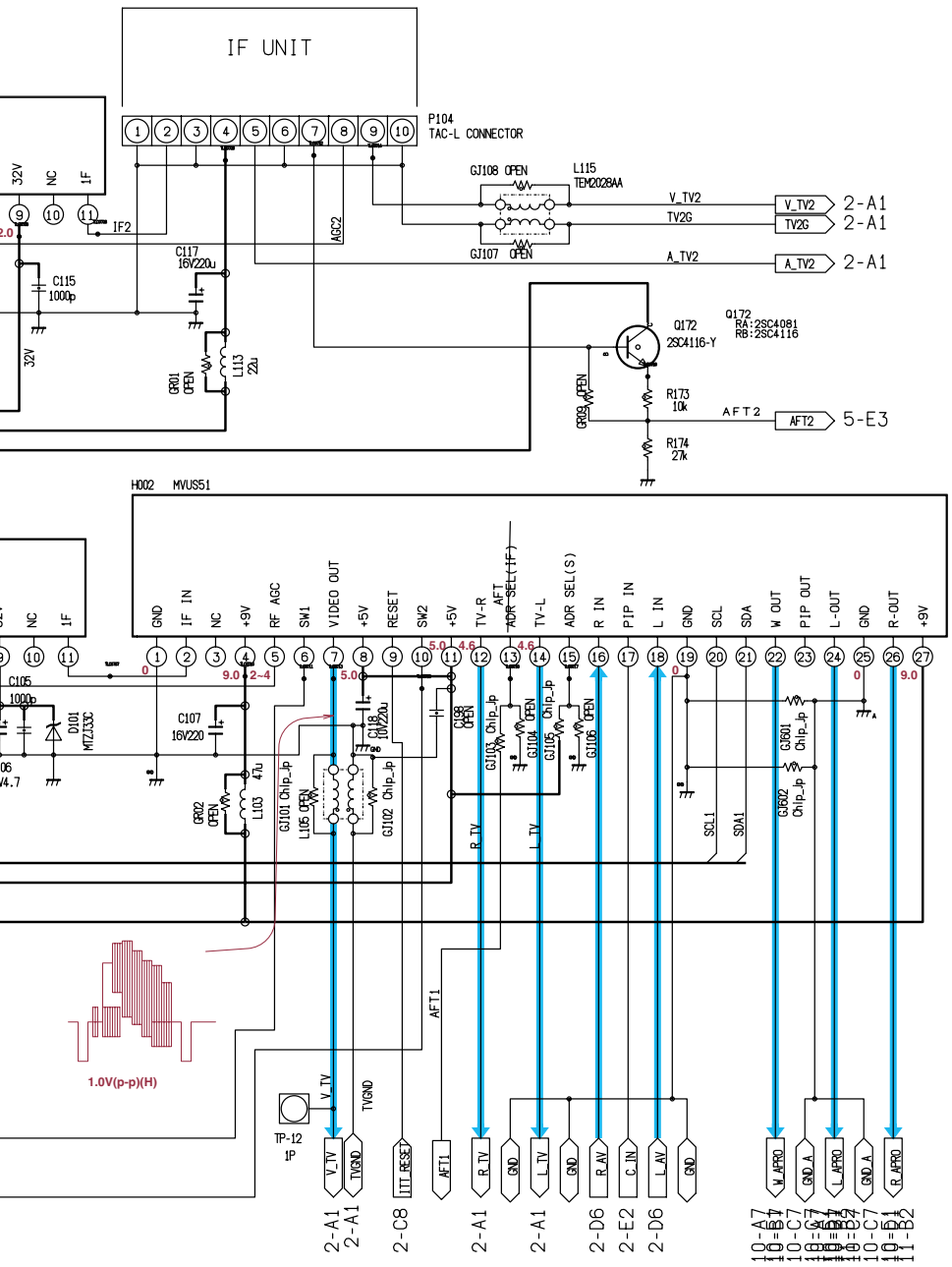

R_OUT
L_OUT
GND_A
R_VARI
L_VARI
R_APRO
L_APRO
W_APRO
A_MUTE
5V1
GND
REF
QS101
BA4558F/
BA4558F-E2
QS102
RN2404
QS103
2SC3326B
QS104
2SC3326B
QS120
BA4558F/
BA4558F-E2
QS501
OPEN
Q614
2SC3326B
Q615
2SC3326B
GJ120 OPEN
DS120
MTZJ22D



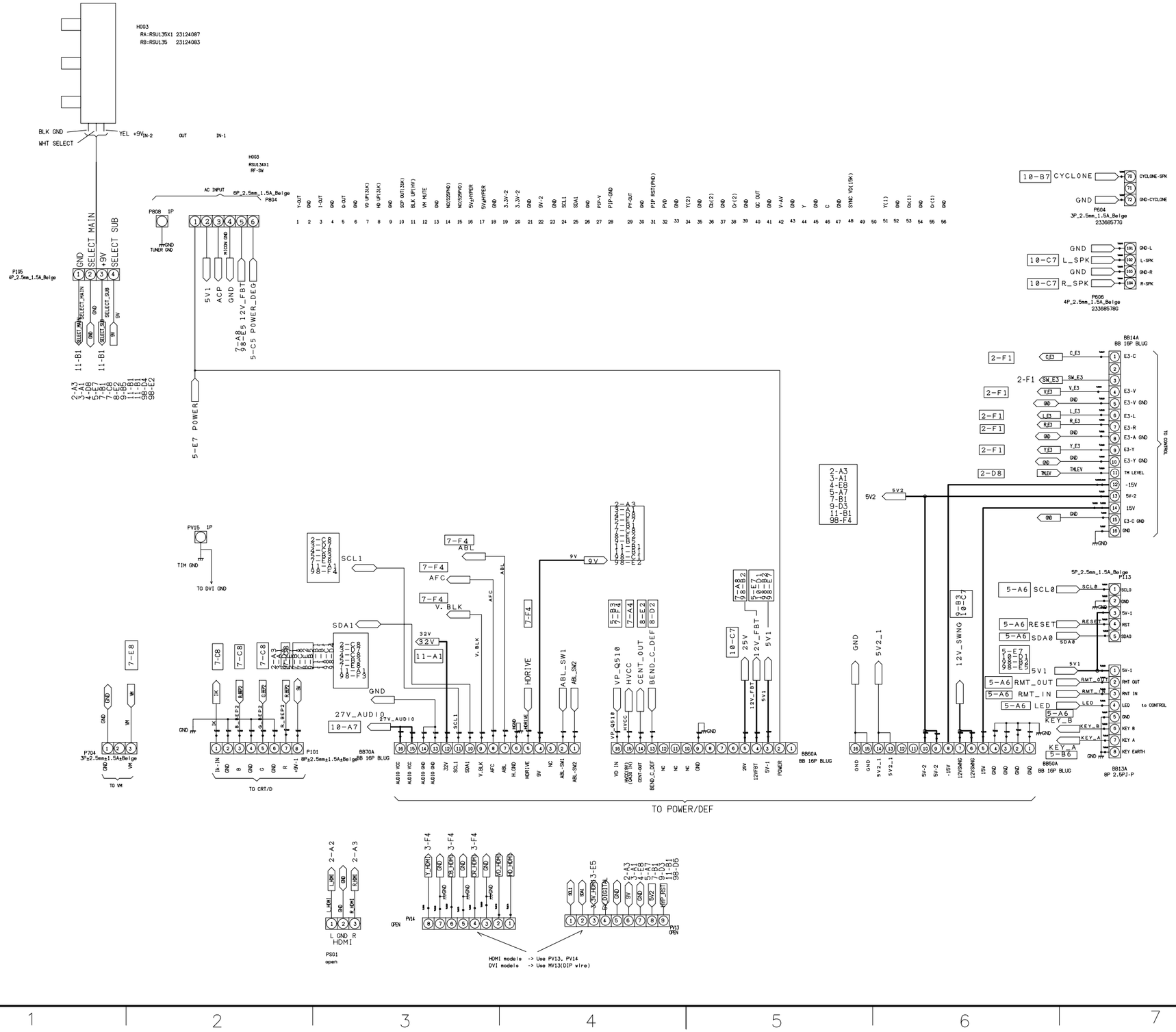
34HF83
SIGNAL - AUDIO OUT
[SHEET-9]


IF UNIT
P104
TAC-L CONNECTOR
H001 ELA52LX4/ELA52LX2
H002 MVUS51
P514
1P
PV35
OPEN
GND
32V
9V
5V2
SCL1
SDA1
IF2
AGC2
V_TV2
TV2G
A_TV2
AFT2
R_TV
L_TV
AFT1
V_TV
TVGND
LIT_RESET
1.0V(p-p)(H)
SELECT_MAIN
SELECT_SUB
34HF83
SIGNAL - IF
[SHEET-10]

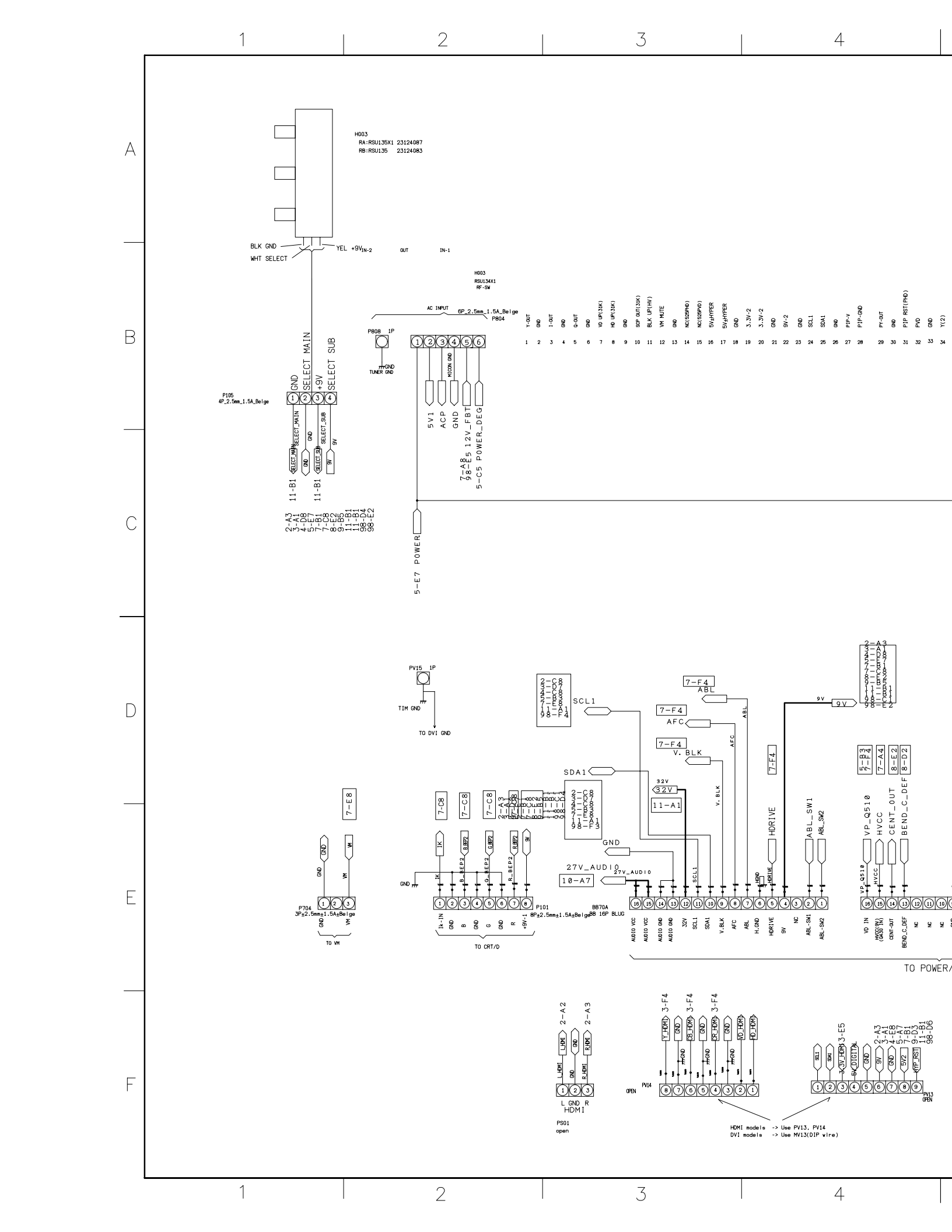

P514
1P
PV35
OPEN
HY01
ELA52LX4/ELA52LX2
AGC
Vt
ADR
SCL
SDA
NC
5V
NC
32V
2~4
5.0
4.8
4.8
5.0
32.0
L121
1.0
L122
1.0
C112
10V220u
D112
OPEN
L111
68u
GND
SCL1
SDA1
H001
ELA52LX4/ELA52LX2
C101
35V3.3
C102
10V220u
C103
OPEN
C105
1000u
C106
50V4.7
D102
OPEN
G101
150
G102
150
L101
68u
98-D3
32V
SCL1
SDA1
5V2
9V
2-A3
3-A1
4-D8
5-E7
7-B1
7-C8
8-E2
9-B5
11-B1
98-C1
98-D4
98-E2
98-C1
SELECT_MAIN
SELECT_SUB
R152
10k
R151
5.6k
Q151
RA:2SA1576A
RB:2SA1586
Q151
2SA1586-Y
Q152
RA:2SC4081
RB:2SC4116
Q152
2SC4116-Y
R150
100

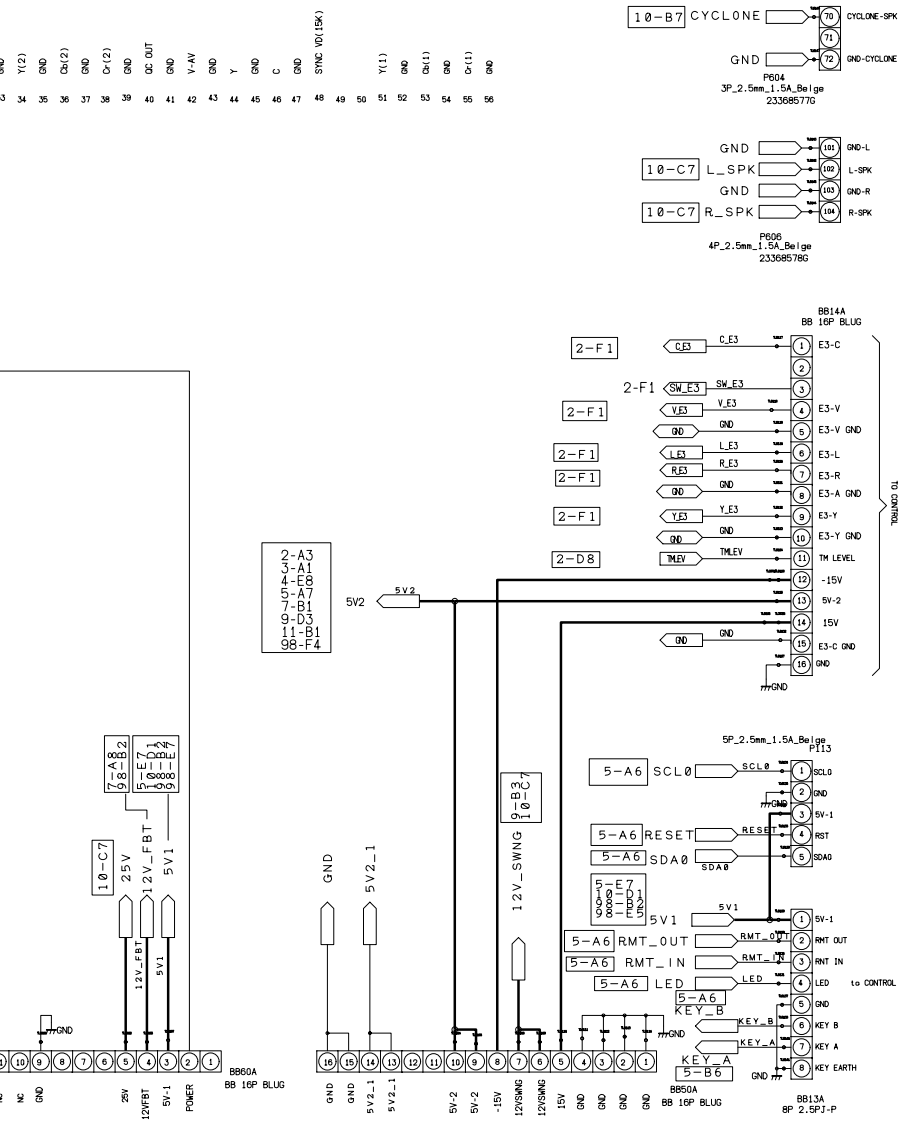


34HF83
SIGNAL - IF
[SHEET-10]



34HF83
SIGNAL - BANKAN
[SHEET-98]


H003
RA:RSU135X1 23124087
RB:RSU135 23124083
BLK GND
WHT SELECT
YEL +9V
OUT
IN-1
H003
RSU134X1
RF-SW
AC INPUT
6P_2.5mm_1.5A_Beige
P804
P808 1P
GND
TUNER GND
Y-OUT
GND
I-OUT
GND
Q-OUT
GND
VD UP(3K)
HD UP(3K)
GND
SCP OUT(3K)
BLK UP(HV)
VM MUTE
GND
NC(SCP/HD)
NC(SCP/VD)
5V_HYPER
5V_HYPER
GND
3.3V-2
3.3V-2
GND
9V-2
GND
SCL1
SDA1
GND
P-IN
P-IN-GND
PY-OUT
GND
P-IN RST(HD)
PVD
GND
Y(2)
P105
4P_2.5mm_1.5A_Beige
GND
SELECT MAIN
+9V
SELECT SUB
SELECT_MAIN
GND
SELECT_SUB
9V
11-B1
11-B1
2-A3
3-A1
4-D8
5-E7
7-D8
8-E6
9-B6
11-B1
11-B1
98-D4
98-E2
5V1
ACP
MICOM GND
7-A8
98-E5 12V_FBT
5-C5 POWER_DEG
5-E7 POWER
PV15 1P
TIM GND
TO DVI GND
SCL1
SDA1
7-F4
ABL
AFC
V. BLK
9V
32V
11-A1
98-F3
GND
27V_AUDIO
10-A7
HDRIVE
ABL_SW1
ABL_SW2
VP_Q510
HVCC
CENT_OUT
BEND_C_DEF
5-B3
7-F4
7-A4
8-E2
8-D2
7-E8
GND
VM
P704
3P±2.5mm±1.5A±Beige
TO VM
7-C8
IK
R_BEP2
G_BEP2
B_BEP2
9V
P101
8P±2.5mm±1.5A±Beige
IK-IN
GND
B
GND
G
GND
R
+9V-1
TO CRT/D
BB70A
BB 16P BLUG
AUDIO VCC
AUDIO VCC
AUDIO GND
AUDIO GND
32V
SCL1
SDA1
V.BLK
AFC
ABL
H.GND
HDRIVE
9V
NC
ABL-SW1
ABL-SW2
VD IN
HVCC
CENT-OUT
BEND_C_DEF
NC
NC
NC
TO POWER/
L_HDMI
GND
R_HDMI
L GND R
HDMI
PS01
open
Y_HDMI
CB_HDMI
CR_HDMI
VD_HDMI
HD_HDMI
PV14
OPEN
SCL
SDA
3.3V_HDMI
5V_DIGITAL
GND
9V
GND
5V2
PIP_RST
PV13
OPEN
HDMI models -> Use PV13, PV14
DVI models -> Use MV13(DIP wire)



34HF83
SIGNAL - BANKAN
[SHEET-98]

34HF83
SIGNAL - BB CONNECTER
[SHEET-99]

G-HYPER

P540(60P)
45639

HDMI

DVI-Y, GND, DVI-Pb, GND, DVI-Pr, GND, SDA1, SCL1
3.3V, 5V DIGITAL, GND DIGITAL, 9V ANALOG, GND ANALOG, 5V ANALOG, HDMI RST
HDMI-L, GND, HDMI-R

Y-HDMI, GND, CB-HDMI, GND, CR-HDMI, GND, SDA1, SCL1
PV14(8P)

3.3V, 5V DIGITAL, GND DIGITAL, 9V ANALOG, GND ANALOG, 5V ANALOG, HDMI RST
PV13(7P)

HDMI-L, GND, HDMI-R
PS01(3P)

P604(3P)
23368577G

CYCLONE	70
NC	71
GND	72

M604
23501345
9P-GLY/NC/BLK-2P

M605
23501346
GLY/BLK

for 34HF83/34HF83
W663
23351194 RA
23351177 RB
23351080 RC

P606(4P)
23368578G

GND	101
L_SPK	102
GND	103
R_SPK	104

M601
23501777
4P-BLK/YEL/BLK/RED
for 34HF83/30HF83

W661
23351121 R1
23351110 R2

W662
23351121 R1
23351110 R2

LJ901

PJ901(3P)
23368577G

2	9
2	10
2	11
NC	

BB14B(16P)
23713013

BB14A(16P)
23713014

1	E3C	1
2	NC	2
3	NC	3
4	E3V	4
5	E3V_GND	5
6	E3-L	6
7	E3-R	7
8	E3A_GND	8
9	E3Y	9
10	E3YGND	10
11	TWLEV	11
12	TMPOL	12
13	5V2	13
14	12VFBT	14
15	E3C_GND	15
16	GND	16

CONTROL

SIGNAL

IF UNIT

PA01B(10P)

12V_GND, SDA1, SCL1, 9V_GND, 9V3, W-OUT, IO_3, GND, MAIN_L, MAIN_R

P104(10P)
23713145

SCL0	1
GND	2
5V1	3
RESET	4
SDA0	5

P113(5P)
23368579G

P105(4P)
23368578G

GND	1
SELECT MAIN	2
9V	3
SELECT SUB	4

MA03
23509105A

P101(8P)
23367068G

Ik_IN	1
GND	2
B	3
GND	4
G	5
GND	6
R	7
9V1	8

M902
23509225

P704(3P)
23368577G

VM1	1
NC	2
GND	3

M703
23501937A

P900(3P)
23167724

P902(8P)
23367068G

Ik_IN	1
GND	2
B	3
GND	4
G	5
GND	6
R	7
9V1	8

CRT-D/SVM

BB13B(8P)
23903022

BB13A(8P)
23903022

1	5V1	1
2	RMT_OUT	2
3	RMT_IN	3
4	LED	4
5	GND	5
6	KEY_B	6
7	KEY_A	7
8	GND	8

PA01(6P)
23368580G

KEY_GND	GND	RMT_IN	5V-1	RMT OUT	LED
1	2	3	4	5	6

P804(6P)
23368580G

POWER	5V-1	ACP	GND	12V FBT	POW_DEG
1	2	3	4	5	6

P808
23367329

GND
1

P514
23367329

GND
1

MA01
23509292

M804
23501869A

M898
23505367A

M514
23509047

BB50A(16P)
23713014

GND	GND	GND	GND	12V_FBT	12V_SWNG1	12V_SWNG1	NC	5V2	5V2	NC	NC	NC	POWER_DEG	ACP	NC
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

BB50B(16P)
23713013

BB60A(16P)
23713014

GND(MICON)	POWER	5V_1	12V_FBT	25V	NC	GND	GND	GND	MAGARI_HOSE	31K_33K	NC	MAGARI	CENT_OUT	VC9V	VD
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

BB60B(16P)
23713013

BB70A(16P)
23713014

ABL_SW2	ABL_SW	LIVE	9V3	HDRIVE	GND	ABL	AFC	V.BLK	SDA1	SCL1	32V	GND(AUDIO)	GND(AUDIO)	27V_AUDIO	27V_AUDIO
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

BB70B(16P)
23713013

P702(4P)
23368578G

12V_FBT	1
GND	2
NC	3
135V	4

M701
23501938

P703(3P)
23368577G

VM1	1
NC	2
GND	3

P701(4P)
23368578G

+137V	1
NC	2
GND	3
+12V	4

P903(9P)
23367069G

GND	9
GND	8
NC	7
CRT-P	6
HEATER	5
NC	4
NC	3
200V	2
200V	1

P705(3P)
23368103

M705
VM

M903
23504959

P809(6P)
23368580G

POWER	5V-1	ACP	GND	12V FBT	POW_DEG
1	2	3	4	5	6

P807
23367329

GND
1

P515
23367329

GND
1

P800(2P)
23367964

1	AC
2	AC

P801

P901(2P)
23367330

3	
4	

AC-INPUT

DG
L901

P806(4P)
23164723

DC_GND	1
DC	2
NC	3
POWERSTART	4

M805
23509276

P805(4P)
23164723

1	DC_GND
2	DC
3	NC
4	POWERSTART

POWER/DEF

P320(3P)
KETSU

GND	GND	GND
1	2	3

M401(1P)

P450(3P)
23164724

M401
23509293

P401(6P)
23368620

	7
	8
NC	
	9
NC	
	10

DY
L462

P311A(15P)
23902655

GND(SWNG)	GND	GND	12V_SWNG1	9V_3	25V	HVCC	DRIVE_VCC	NC	NC	NC	SDA	SCL	PROTECT_OUT	VDIN
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

P311B(15P)
23367724

P312A(15P)
23902655

V_DQF_OUT	CENT_OUT	DEF_GND	EW_FB	MAGARI_OUT	200V_LVP	AFC	ED	V_GND	ED_OUT	NC	ABL_EHT	V.DRIVE	V_FB	V_PROTECT
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

P312B(15P)
23367724

GND	1
GND	2
GND	3

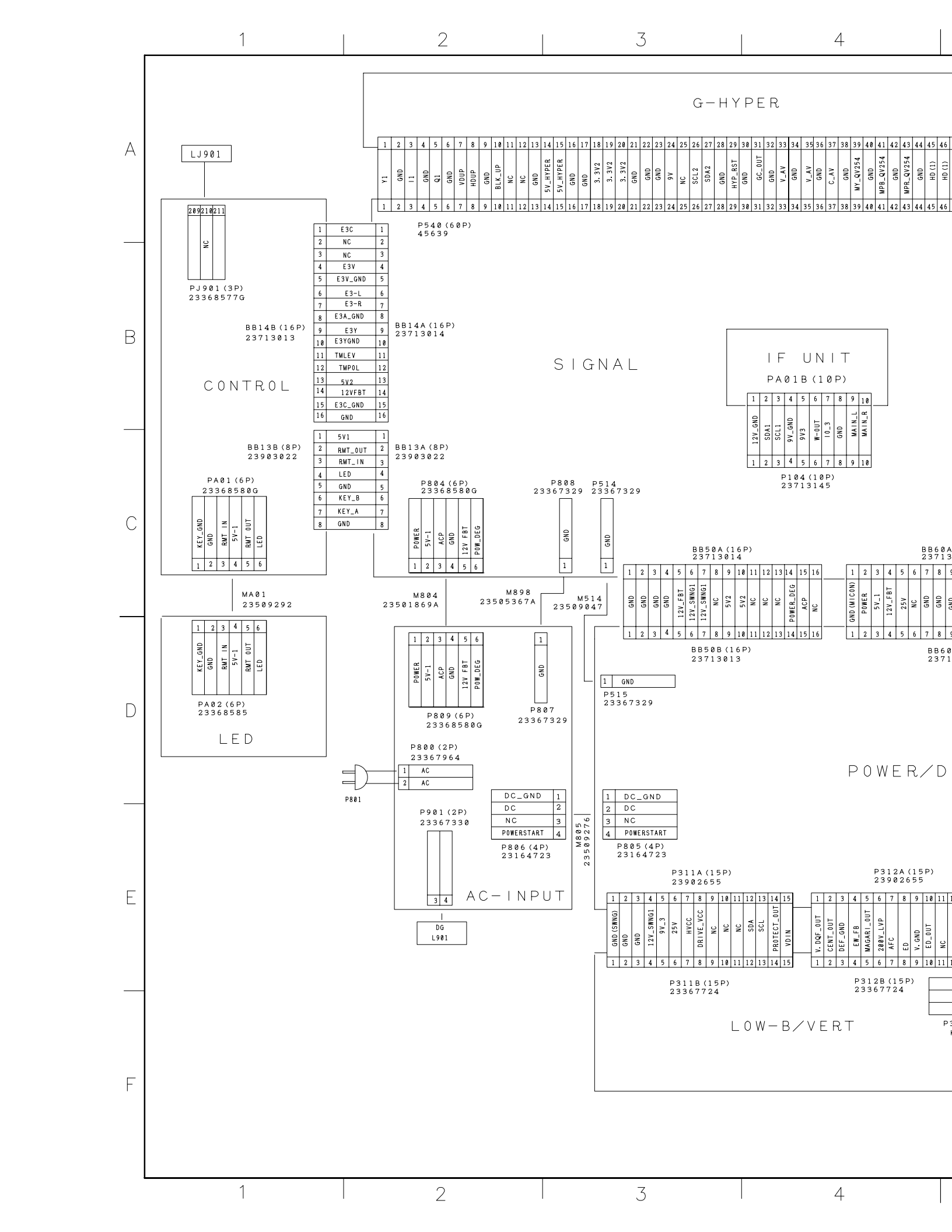
P321(3P)
KETSU

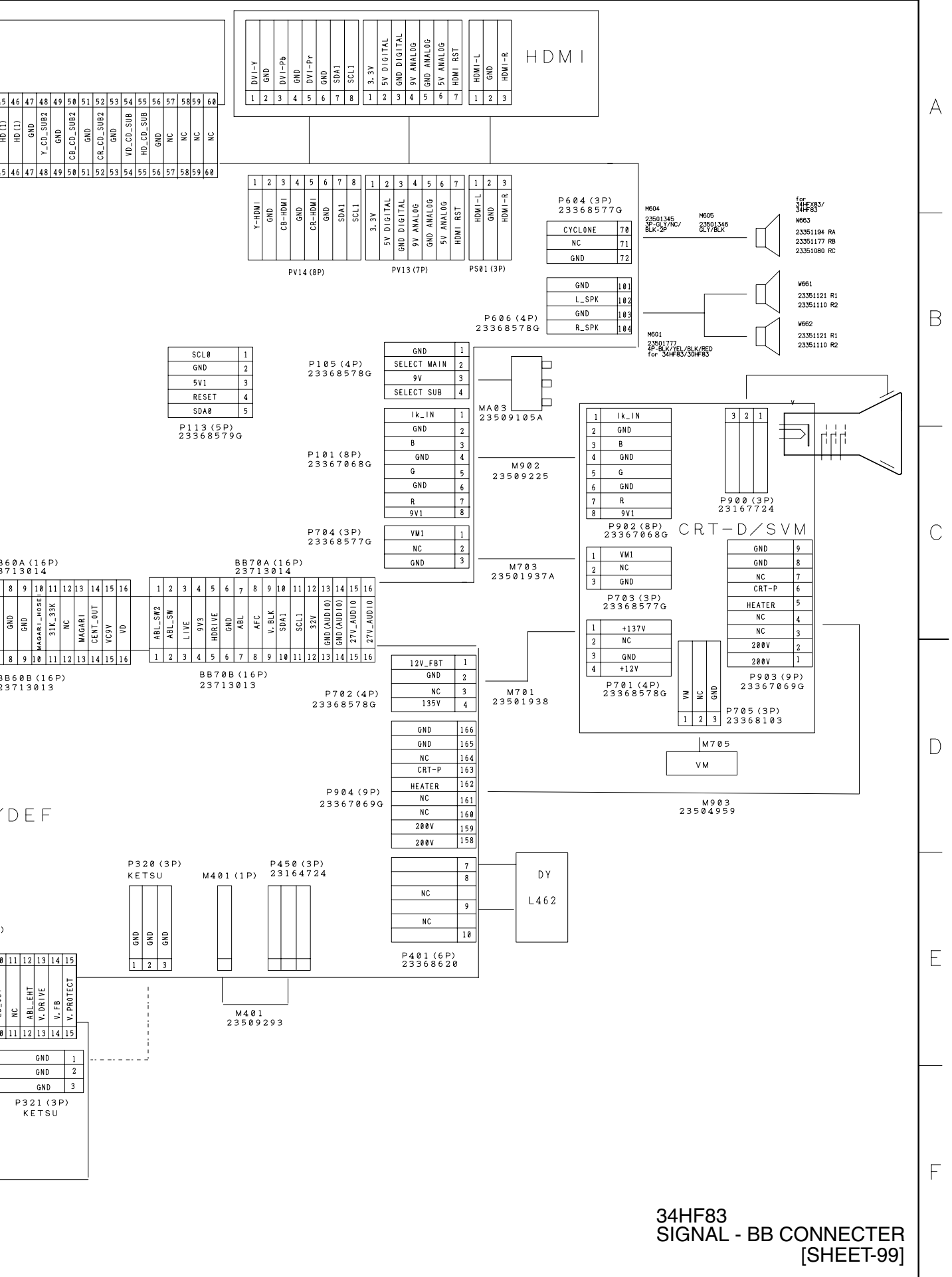
LOW-B/VERT

LED

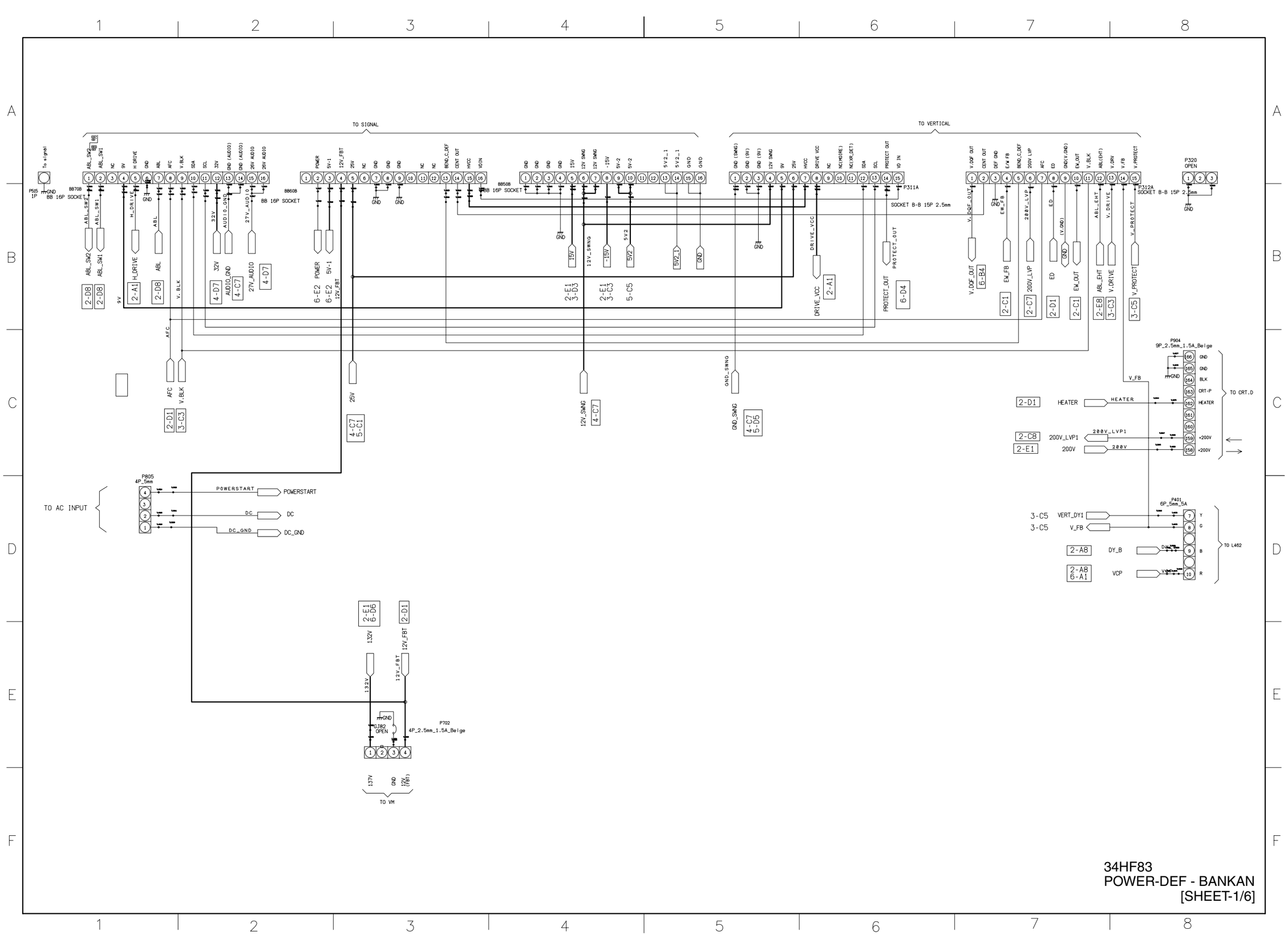
PA02(6P)
23368585

KEY_GND	GND	RMT_IN	5V-1	RMT OUT	LED
1	2	3	4	5	6

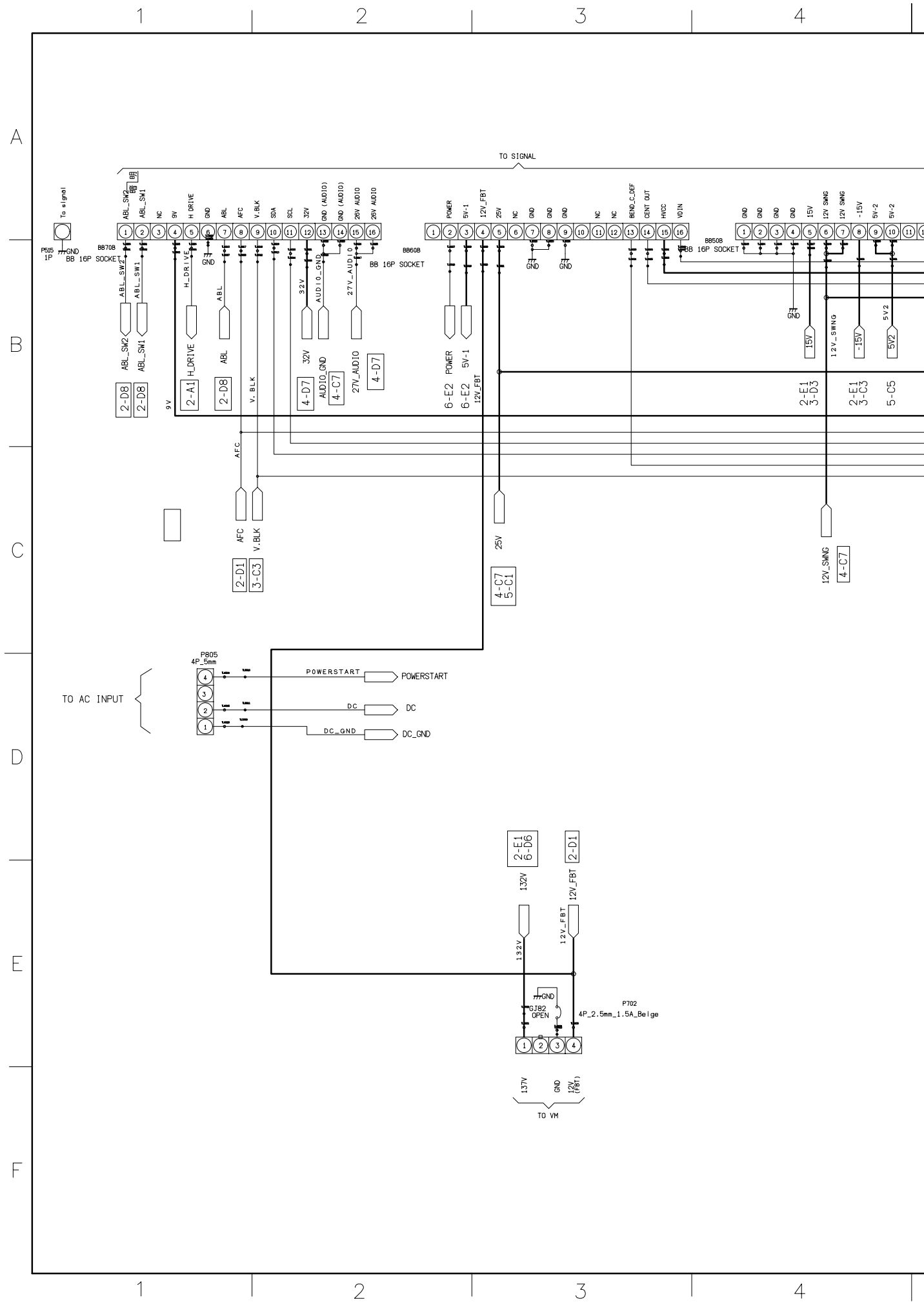

G-HYPER
LJ901
P540(60P)
45639
PJ901(3P)
23368577G
BB14B(16P)
23713013
BB14A(16P)
23713014
CONTROL
SIGNAL
IF UNIT
PA01B(10P)
P104(10P)
23713145
BB13B(8P)
23903022
BB13A(8P)
23903022
PA01(6P)
23368580G
P804(6P)
23368580G
P808
23367329
P514
23367329
BB50A(16P)
23713014
BB50B(16P)
23713013
MA01
23509292
M804
23501869A
M898
23505367A
M514
23509047
P515
23367329
PA02(6P)
23368585
LED
P809(6P)
23368580G
P807
23367329
P800(2P)
23367964
P801
P901(2P)
23367330
AC-INPUT
DG
L901
P806(4P)
23164723
M805
23509276
P805(4P)
23164723
POWER/D
P311A(15P)
23902655
P312A(15P)
23902655
P311B(15P)
23367724
P312B(15P)
23367724
LOW-B/VERT

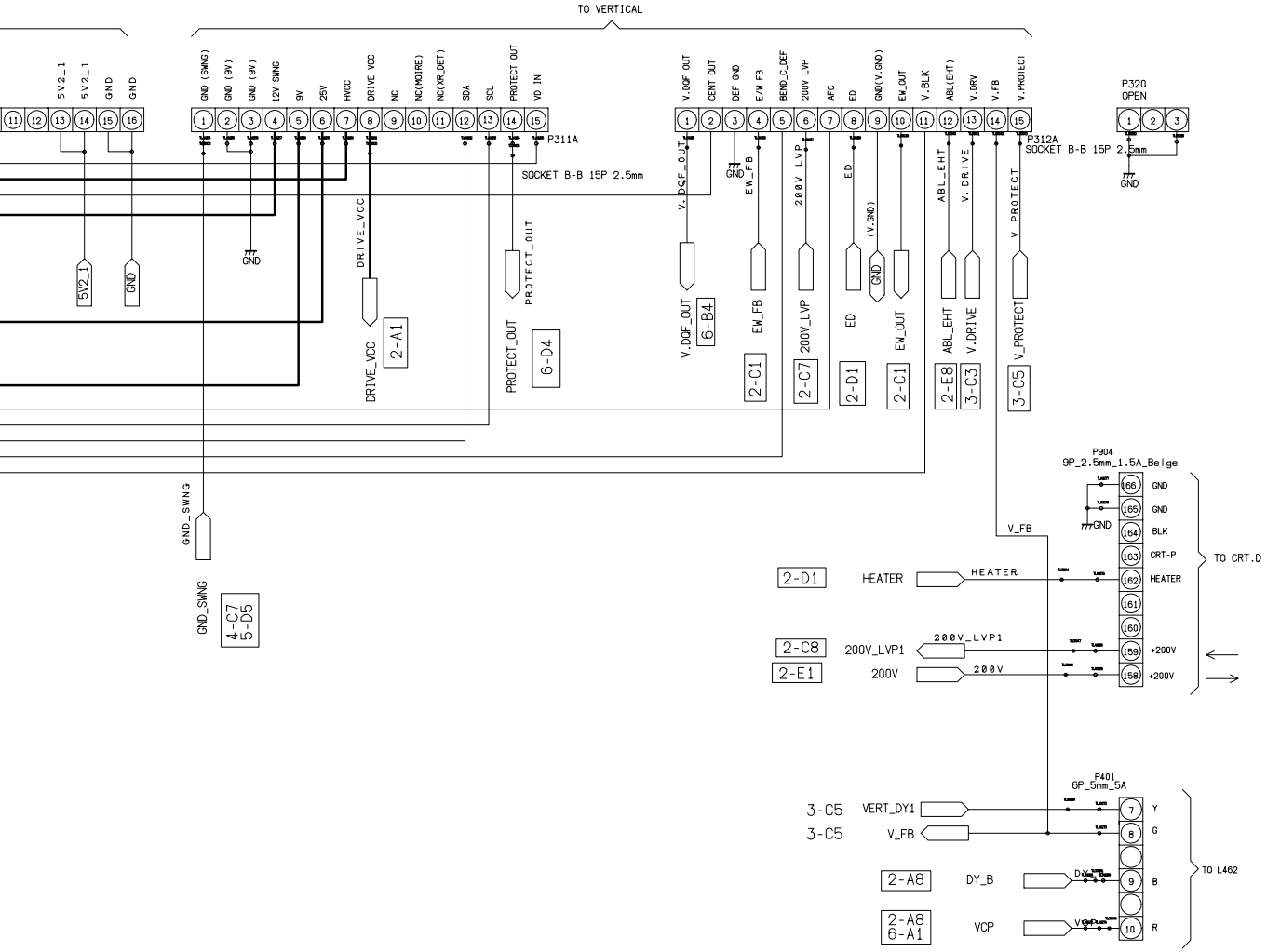


34HF83
SIGNAL - BB CONNECTER
[SHEET-99]

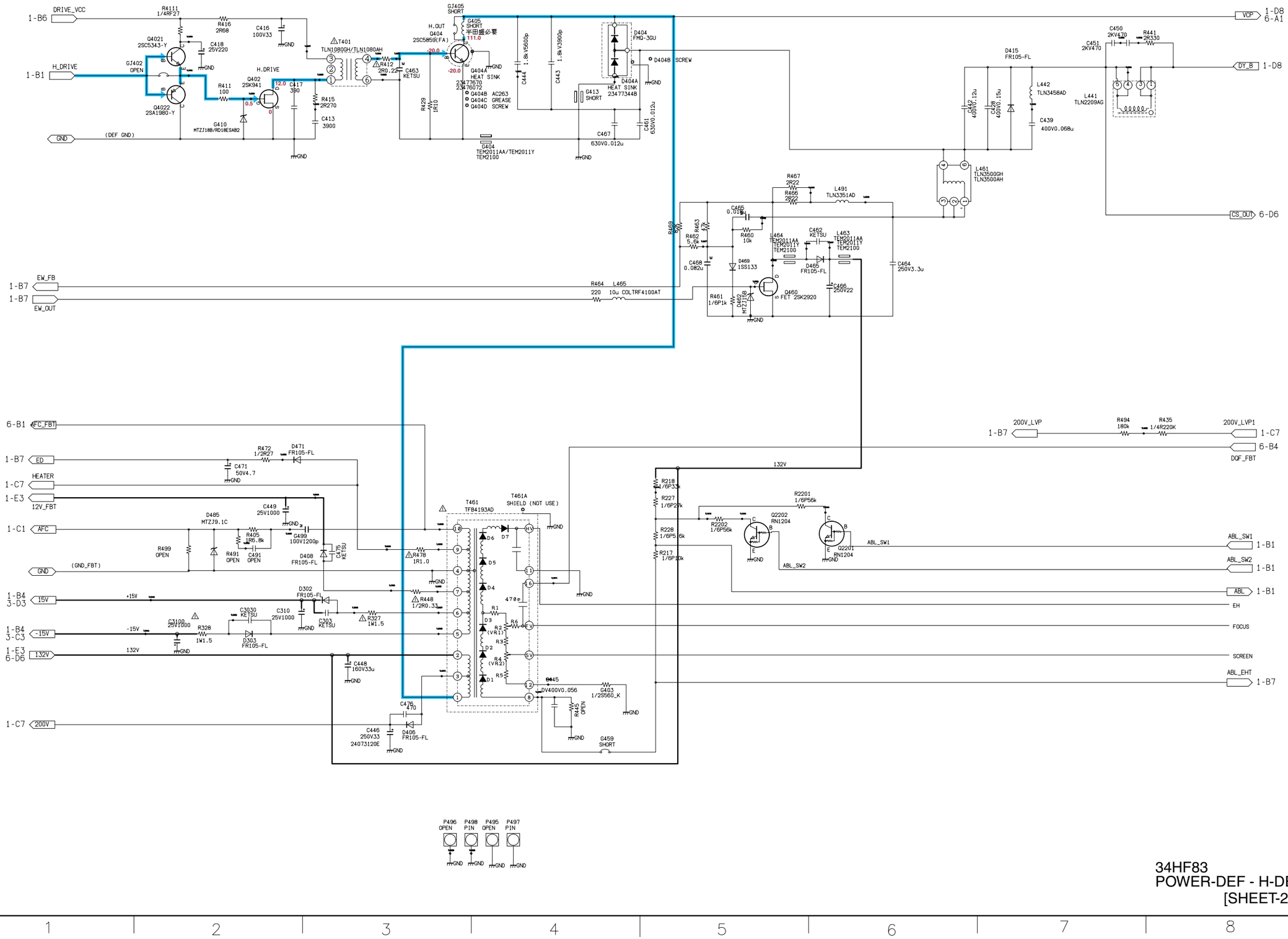


34HF83
POWER-DEF - BANKAN
[SHEET-1/6]

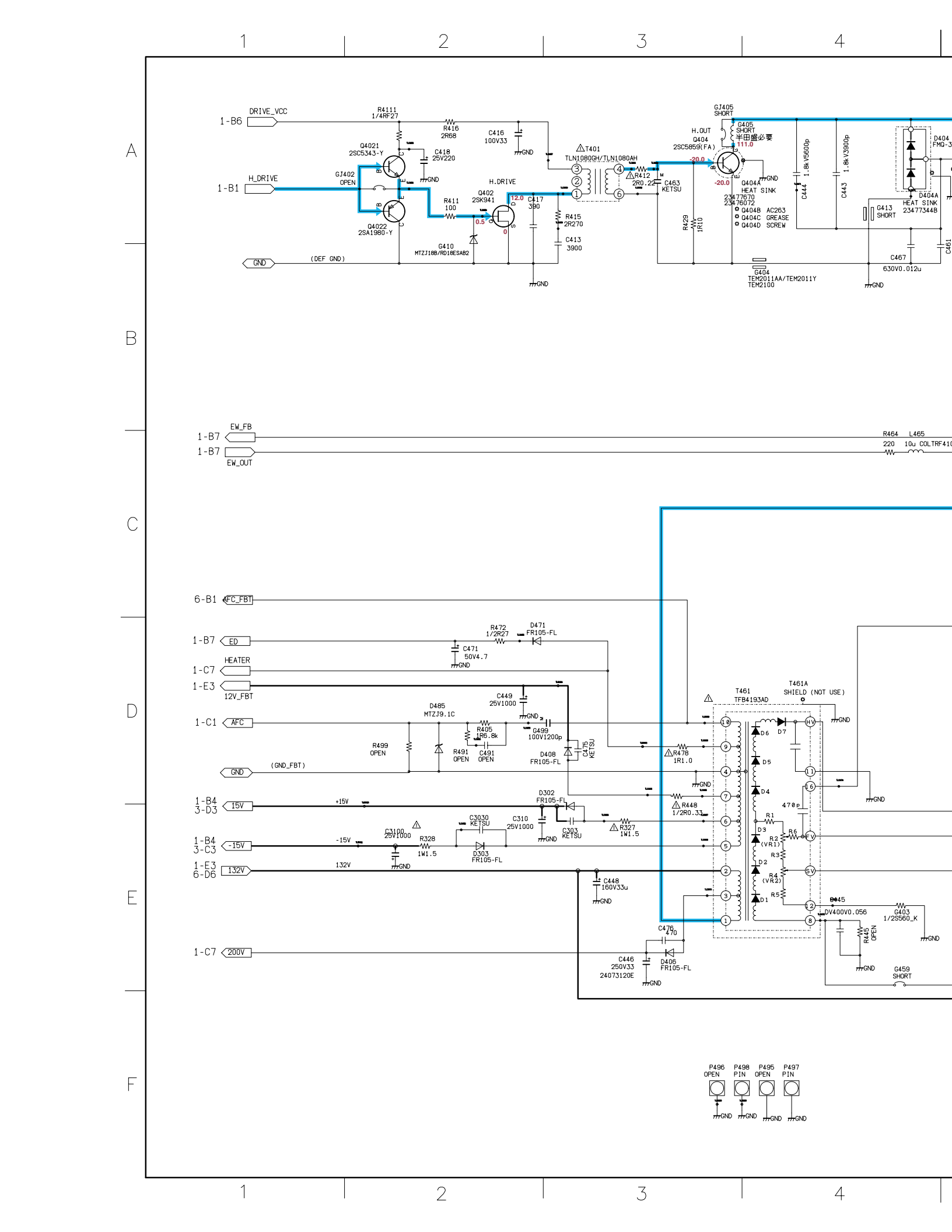

TO SIGNAL
BB70B
BB 16P SOCKET
BB60B
BB 16P SOCKET
BB50B
BB 16P SOCKET
ABL_SW2
ABL_SW1
NC
9V
H DRIVE
GND
ABL
AFC
V-BLK
SDA
SCL
32V
GND (AUDIO)
GND (AUDIO)
26V AUDIO
26V AUDIO
POWER
5V-1
12V_FBT
25V
NC
GND
GND
GND
NC
NC
BEND_C_DEF
CENT OUT
HVCC
VDIN
GND
GND
GND
GND
15V
12V SWNG
12V SWNG
-15V
5V-2
5V-2
P515
1P
GND
H_DRIVE
ABL
V. BLK
32V
AUDIO_GND
27V_AUDIO
2-A1
2-D8
2-D8
2-D8
4-D7
4-C7
4-D7
6-E2 POWER
6-E2 5V-1
12V_FBT
2-E1
3-D3
2-E1
3-C3
5-C5
15V
12V_SWNG
-15V
5V2
12V_SWNG
4-C7
AFC
V.BLK
2-D1
3-C3
25V
4-C7
5-C1
TO AC INPUT
P805
4P_5mm
POWERSTART
POWERSTART
DC
DC
DC_GND
DC_GND
2-E1
6-D6
2-D1
132V
12V_FBT
132V
12V_FBT
GND
GJ82
OPEN
P702
4P_2.5mm_1.5A_Beige
137V
GND
12V
(FB1)
TO VM

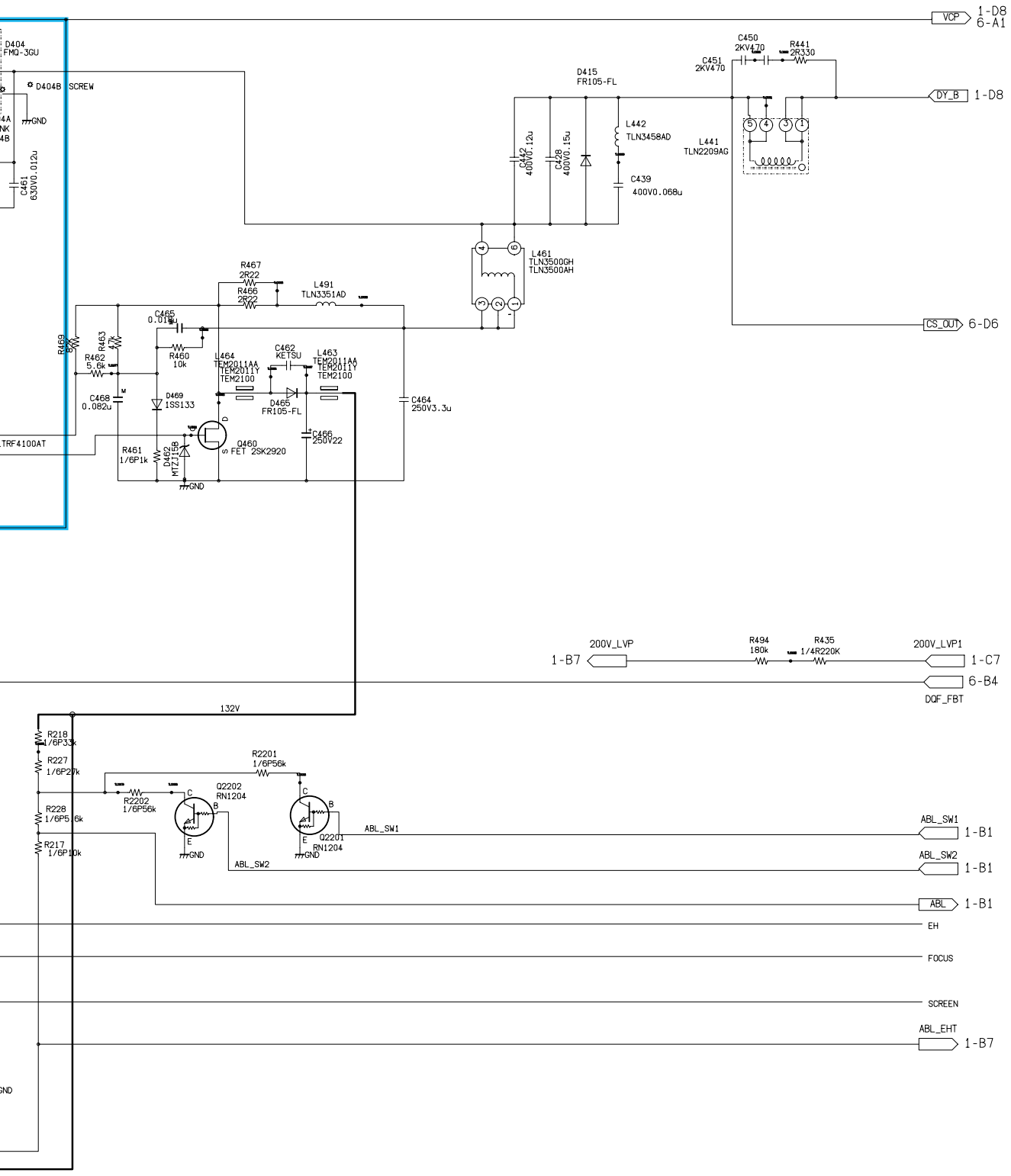


34HF83
POWER-DEF - BANKAN
[SHEET-1/6]

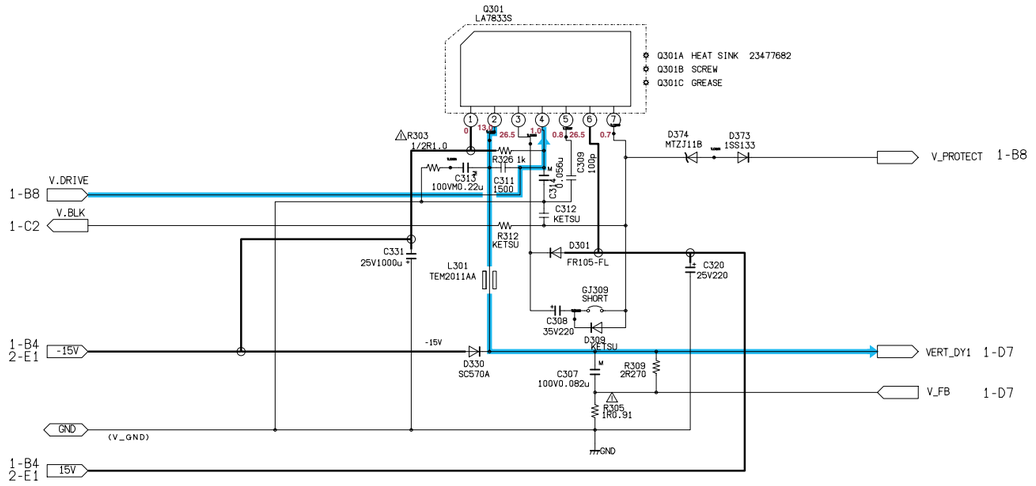


34HF83
POWER-DEF - H-DEF
[SHEET-2/6]

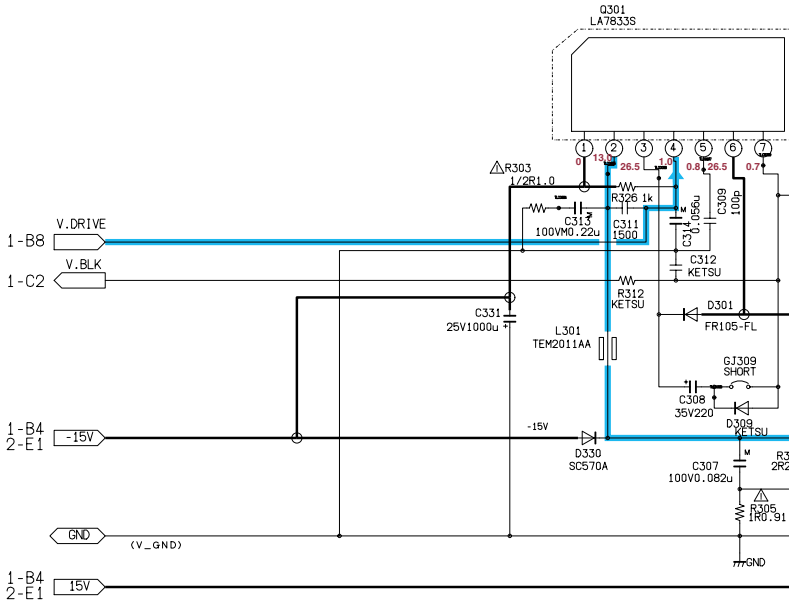

1 2 3 4
A B C D E F
1-B6 DRIVE_VCC
R4111 1/4RF27
R416 2R68
C416 100V33
GND
Q4021 2SC5343-Y
C418 25V220
GJ402 OPEN
1-B1 H_DRIVE
Q4022 2SA1980-Y
R411 100
Q402 2SK941
H.DRIVE
12.0
0.5
0
C417 390
R415 2R270
C413 3900
G410 MTZJ18B/RD18ESAB2
(DEF GND)
T401 TLN1080GH/TLN1080AH
R412 2R0.22
C463 KETSU
GJ405 SHORT
G405 SHORT 半田盛必要
H.OUT
Q404 2SC5859(FA)
111.0
-20.0
-20.0
Q404A HEAT SINK 23477670 23476072
Q404B AC263
Q404C GREASE
Q404D SCREW
R429 1R10
C444 1.8kV5600p
C443 1.8kV3900p
D404 FMQ-3
D404A HEAT SINK 23477344B
G413 SHORT
C467 630V0.012u
G404 TEM2011AA/TEM2011Y TEM2100
1-B7 EW_FB
1-B7 EW_OUT
R464 220
L465 10u COLTRF41
6-B1 AFC_FBT
1-B7 ED
R472 1/2R27
D471 FR105-FL
C471 50V4.7
HEATER
1-C7
1-E3 12V_FBT
1-C1 AFC
C449 25V1000
D485 MTZJ9.1C
R405 1R6.8k
G499 100V1200p
R499 OPEN
R491 OPEN
C491 OPEN
D408 FR105-FL
C475 KETSU
GND (GND_FBT)
T461 TFB4193AD
T461A SHIELD (NOT USE)
R478 1R1.0
R448 1/2R0.33
1-B4 3-D3 15V
+15V
D302 FR105-FL
C3030 KETSU
C310 25V1000
C303 KETSU
R327 1W1.5
1-B4 3-C3 -15V
C3100 25V1000
R328 1W1.5
D303 FR105-FL
1-E3 6-D6 132V
C448 160V33u
D6 D7 D5 D4 D3 D2 D1
470p
R1 R2 (VR1) R3 R4 (VR2) R5 R6
HV FV SV
G445
DV400V0.056
G403 1/2S560_K
R445 OPEN
G459 SHORT
1-C7 200V
C476 470
C446 250V33 24073120E
D406 FR105-FL
P496 OPEN
P498 PIN
P495 OPEN
P497 PIN

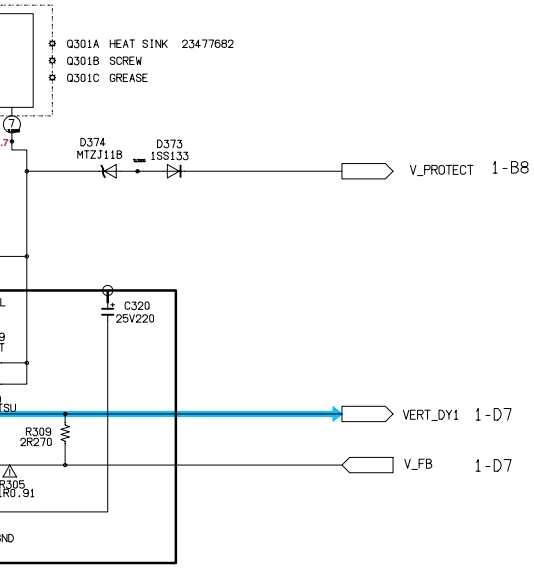


34HF83
POWER-DEF - H-DEF
[SHEET-2/6]

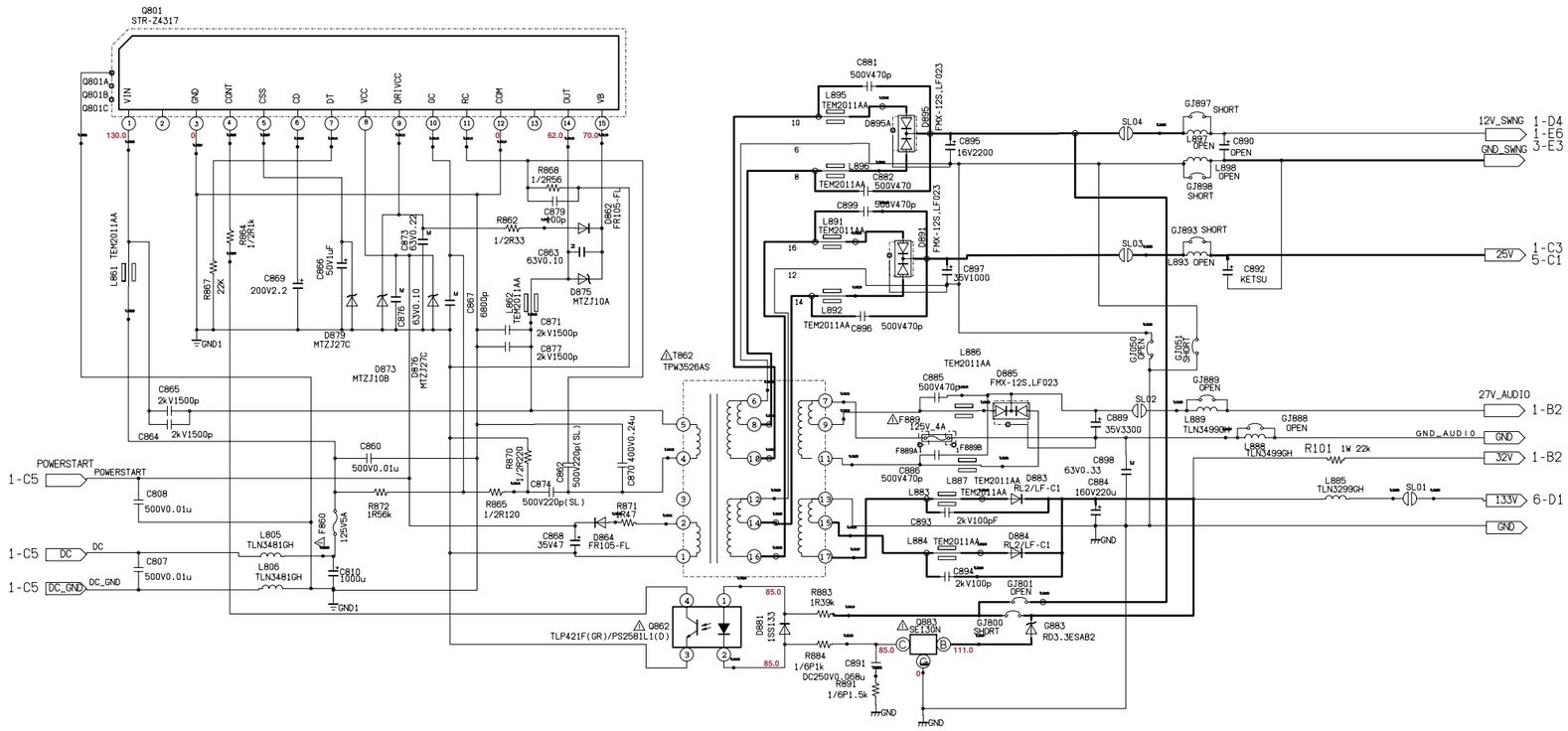


34HF83
POWER-DEF - V-DEF
[SHEET-3/6]

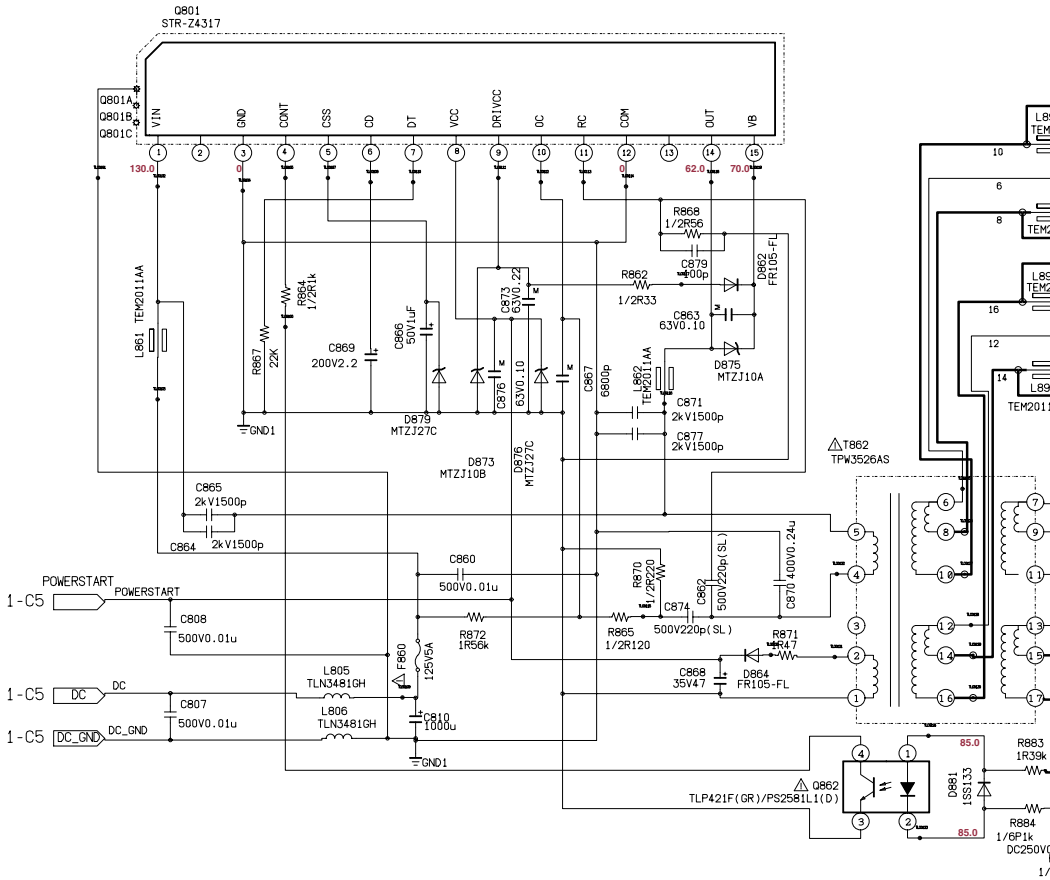

Q301
LA7833S
V.DRIVE
1-B8
V.BLK
1-C2
1-B4
2-E1
-15V
GND
(V_GND)
1-B4
2-E1
15V
R303
1/2R1.0
R326 1k
C313
100VM0.22u
C311
1500
C314
0.056u
C309
100p
C312
KETSU
R312
KETSU
C331
25V1000u
L301
TEM2011AA
D301
FR105-FL
GJ309
SHORT
C308
35V220
D309
KETSU
D330
SC570A
C307
100V0.082u
R305
1R0.91
GND

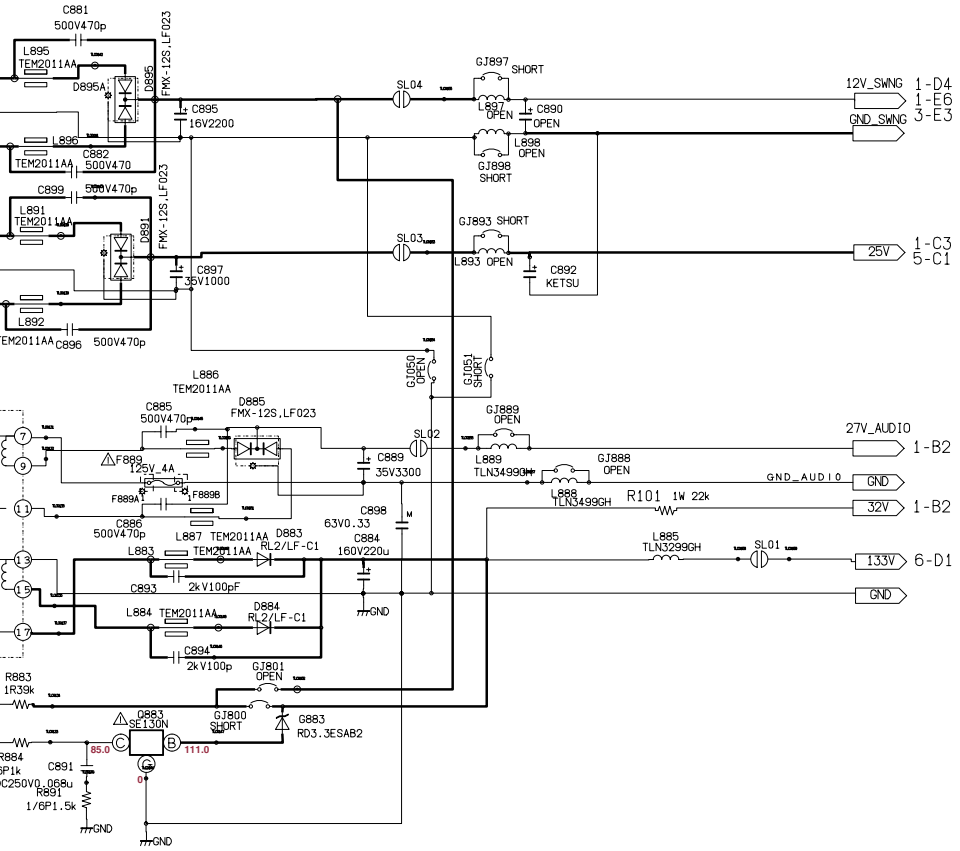


34HF83
POWER-DEF - V-DEF
[SHEET-3/6]

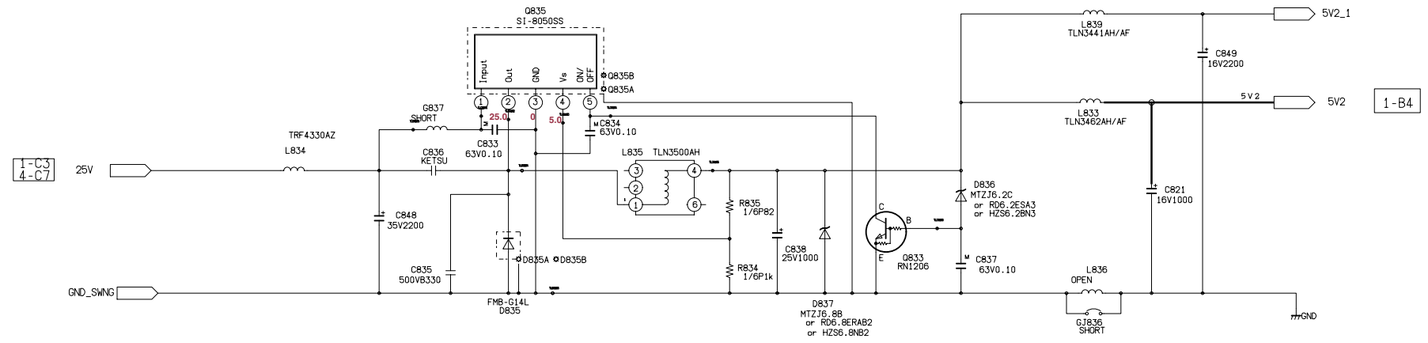


34HF83
POWER-DEF - MAIN-POWER
[SHEET-4/6]

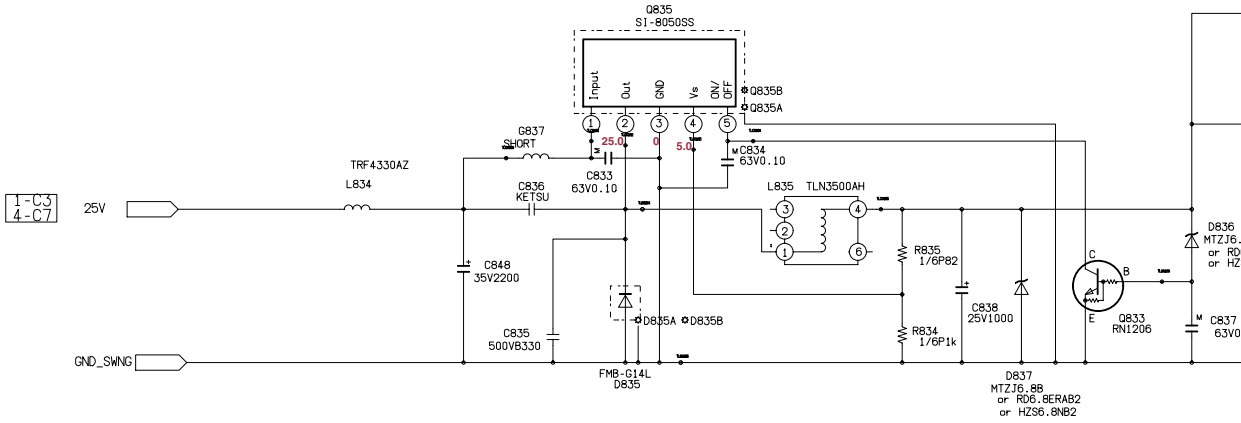

Q801
STR-Z4317
Q801A
Q801B
Q801C
VIN
GND
CONT
CSS
CD
DT
VCC
DR1VCC
OC
RC
COM
OUT
VB
130.0
0
62.0
70.0
L861 TEM2011AA
R867 22K
R864 1/2R1k
C869 200V2.2
C866 50V1uF
C873 63V0.22
C876 63V0.10
C867 6800p
L862 TEM2011AA
R868 1/2R56
C879 100p
R862 1/2R33
C863 63V0.10
D862 FR105-FL
D875 MTZJ10A
C871 2kV1500p
C877 2kV1500p
D879 MTZJ27C
D873 MTZJ10B
D876 MTZJ27C
GND1
C865 2kV1500p
C864 2kV1500p
T862 TPW3526AS
C860 500V0.01u
R870 1/2R220
C862 500V220p(SL)
C870 400V0.24u
C874
R865 1/2R120
500V220p(SL)
R871 1R47
C868 35V47
D864 FR105-FL
POWERSTART
1-C5
C808 500V0.01u
R872 1R56k
L805 TLN3481GH
F860 125V5A
DC
C807 500V0.01u
L806 TLN3481GH
C810 1000u
DC_GND
Q862
TLP421F(GR)/PS2581L1(D)
D881 1SS133
85.0
R883 1R39k
R884 1/6P1k
DC250V

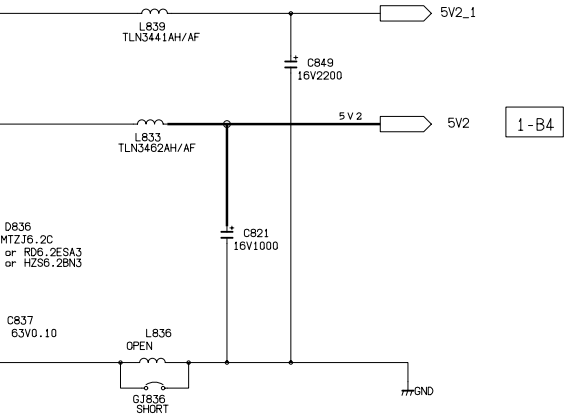


34HF83
POWER-DEF - MAIN-POWER
[SHEET-4/6]

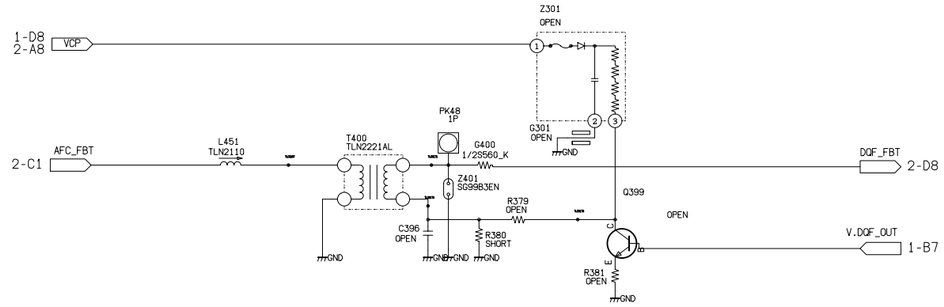


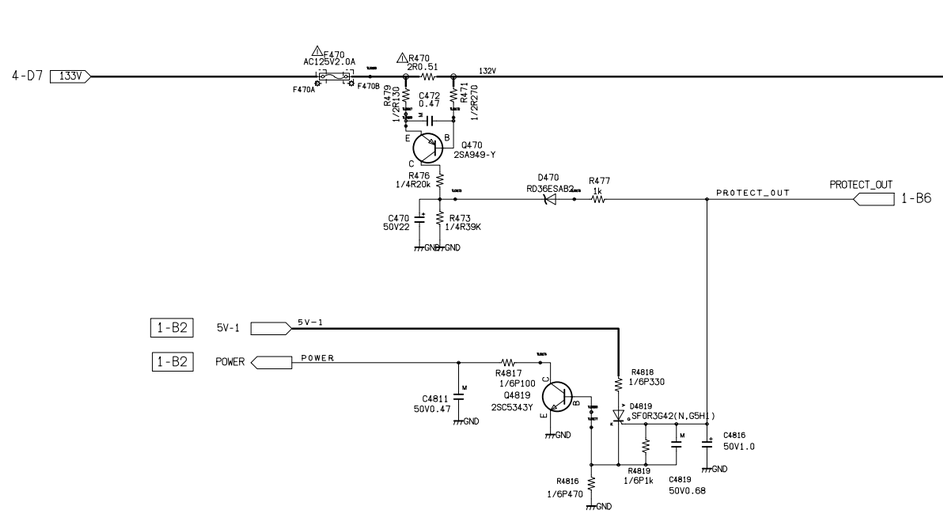
34HF83
POWER-DEF - SUB-POWER
[SHEET-5/6]

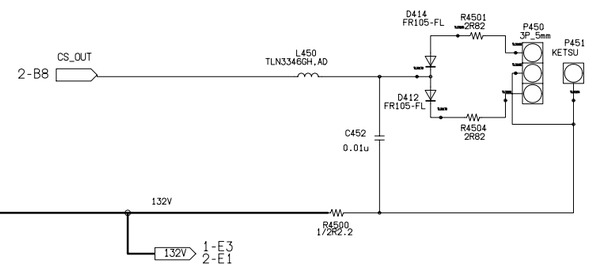

Q835
S1-8050SS
Input
Out
GND
Vo
ON/OFF
Q835B
Q835A
G837
SHORT
TRF4330AZ
L834
C833
63V0.10
C834
63V0.10
C836
KETSU
L835 TLN3500AH
1-C3
4-C7
25V
C848
35V2200
C835
500VB330
GND_SWNG
D835A
D835B
FMB-G14L
D835
R835
1/6P82
R834
1/6P1k
C838
25V1000
D837
MTZJ6.8B
or RD6.8ERAB2
or HZS6.8NB2
Q833
RN1206
D836
MTZJ6.
or RD
or HZ
C837
63V0



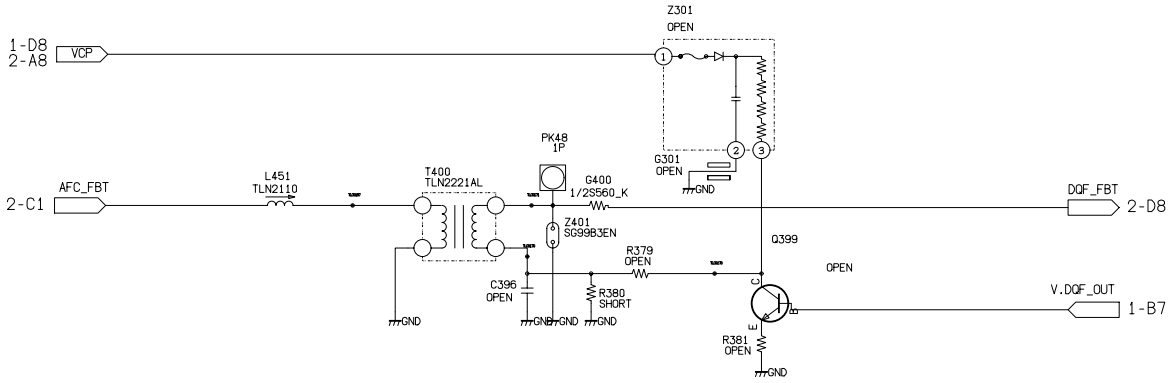
34HF83
POWER-DEF - SUB-POWER
[SHEET-5/6]

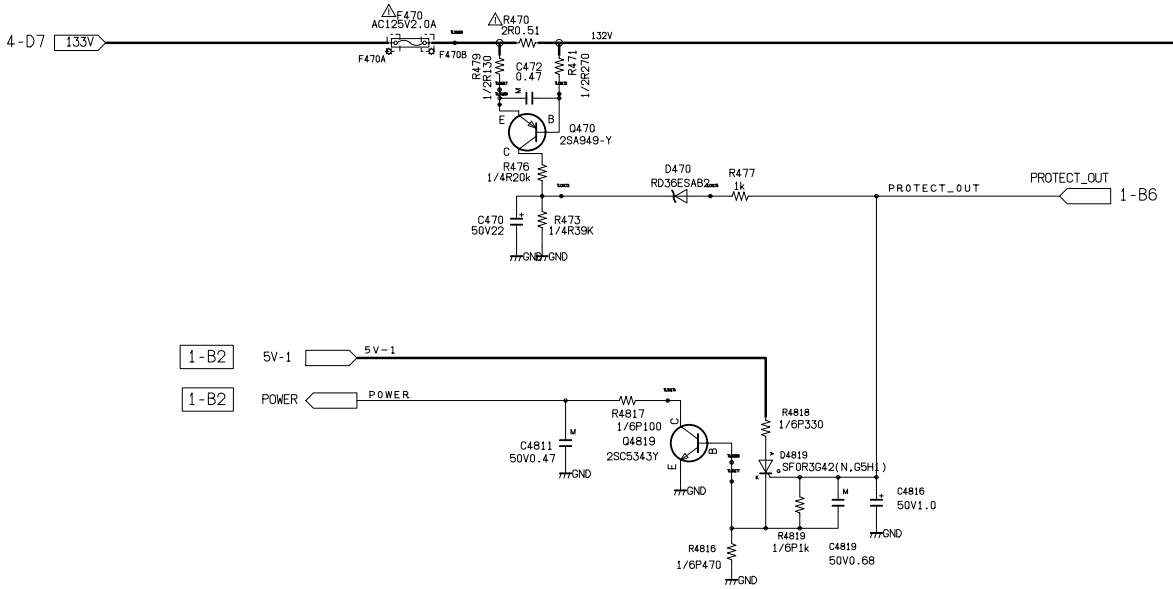




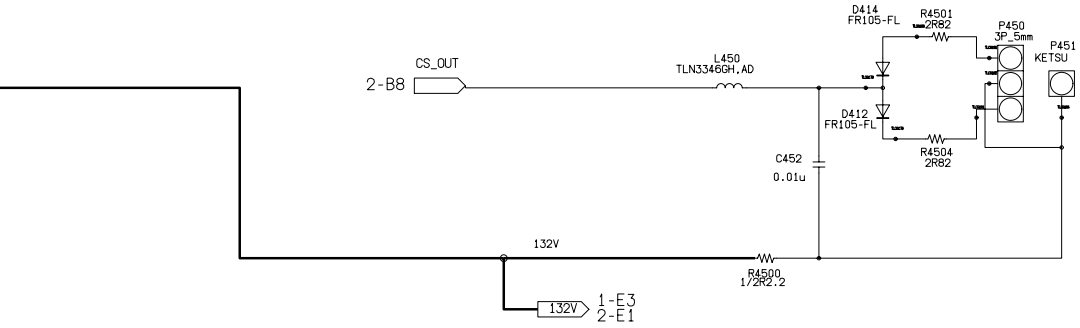


34HF83
POWER-DEF - DQF/OCP/OTHER
[SHEET-6/6]

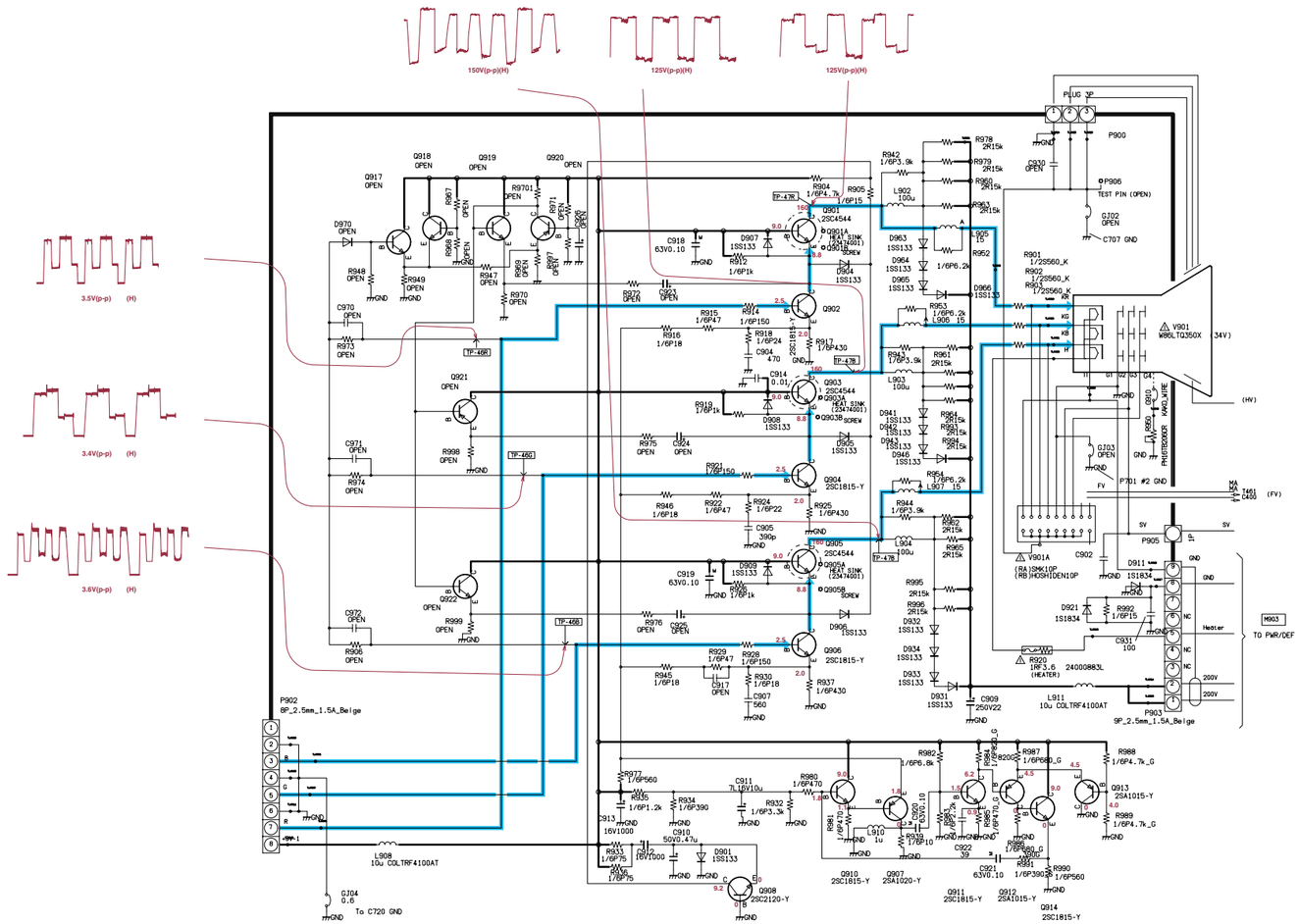

1-D8
2-A8
VCP
Z301
OPEN
PK48
1P
G301
OPEN
GND
2-C1
AFC_FBT
L451
TLN2110
T400
TLN2221AL
G400
1/2S560_K
DQF_FBT
2-D8
Z401
SG99B3EN
Q399
R379
OPEN
OPEN
C396
OPEN
R380
SHORT
V.DQF_OUT
1-B7
R381
OPEN


4-D7
133V
F470
AC125V2.0A
F470A
F470B
R470
2R0.51
132V
R479
1/2R270
C472
0.47
R471
1/2R270
Q470
2SA949-Y
R476
1/4R20k
D470
RD36ESAB2
R477
1k
PROTECT_OUT
PROTECT_OUT
1-B6
C470
50V22
R473
1/4R39K
GND

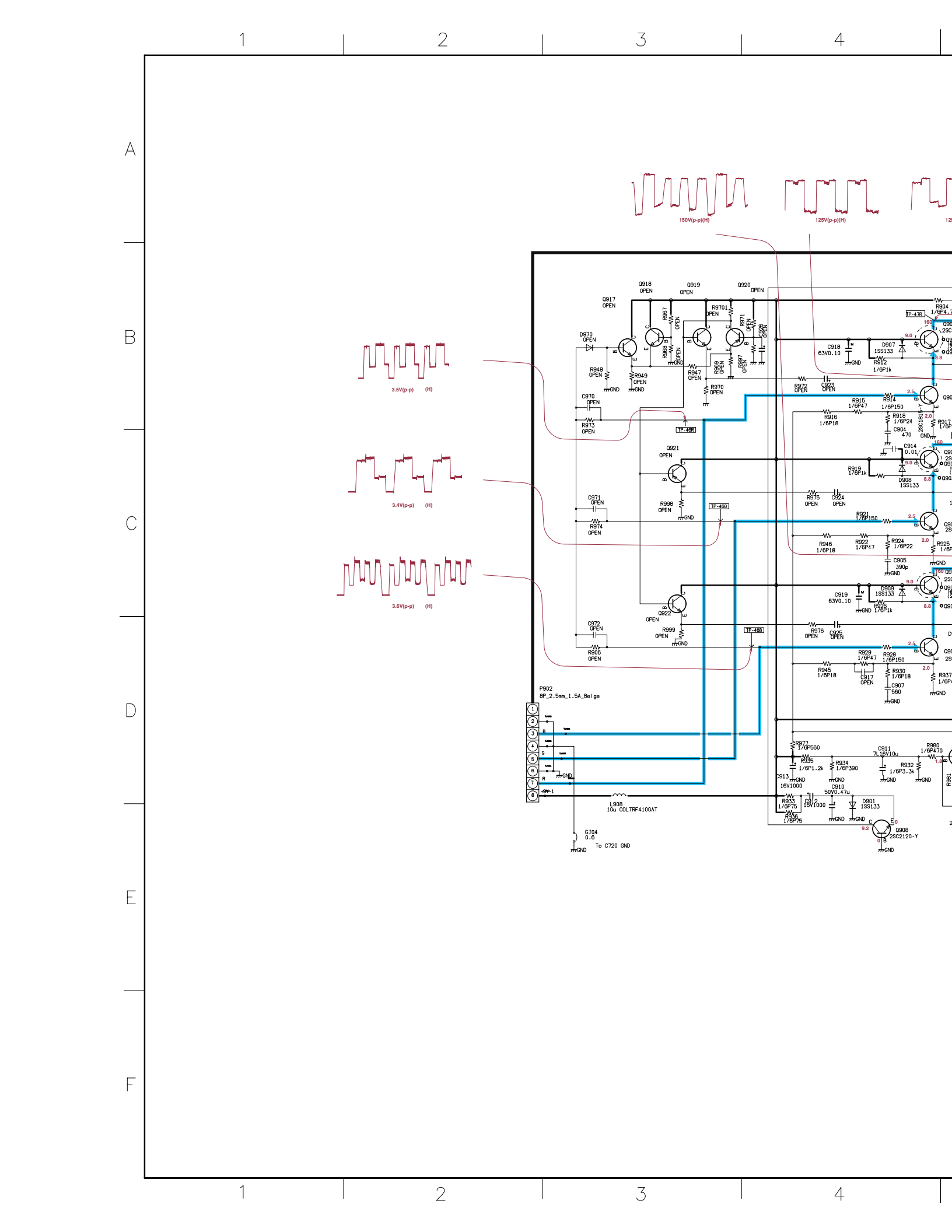
1-B2
5V-1
5V-1
1-B2
POWER
POWER
R4817
1/6P100
Q4819
2SC5343Y
R4818
1/6P330
D4819
SF0R3G42(N,G5H1)
C4811
50V0.47
C4816
50V1.0
R4819
1/6P1k
C4819
50V0.68
R4816
1/6P470
GND

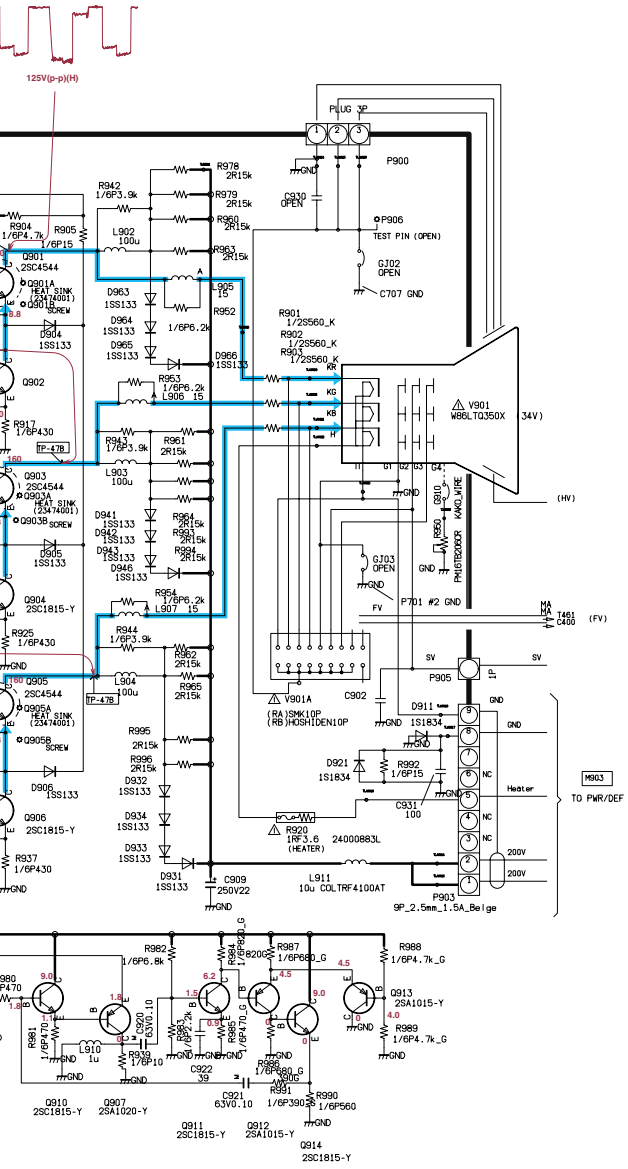


34HF83
POWER-DEF - DQF/OCP/OTHER
[SHEET-6/6]

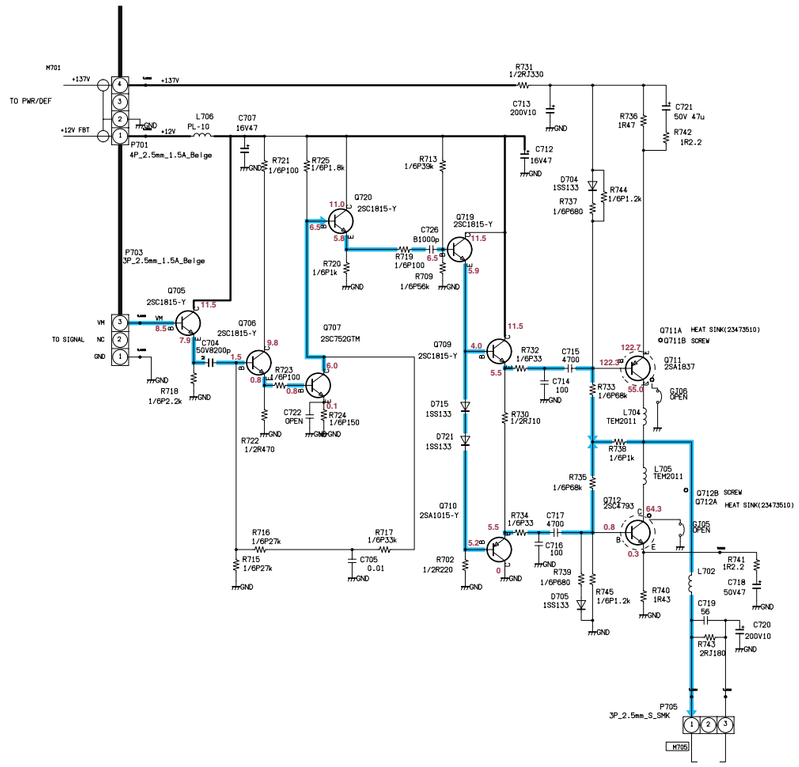


34HF83
CRT-D_SVM_HF - CRT DRIVE
[SHEET-1/2]

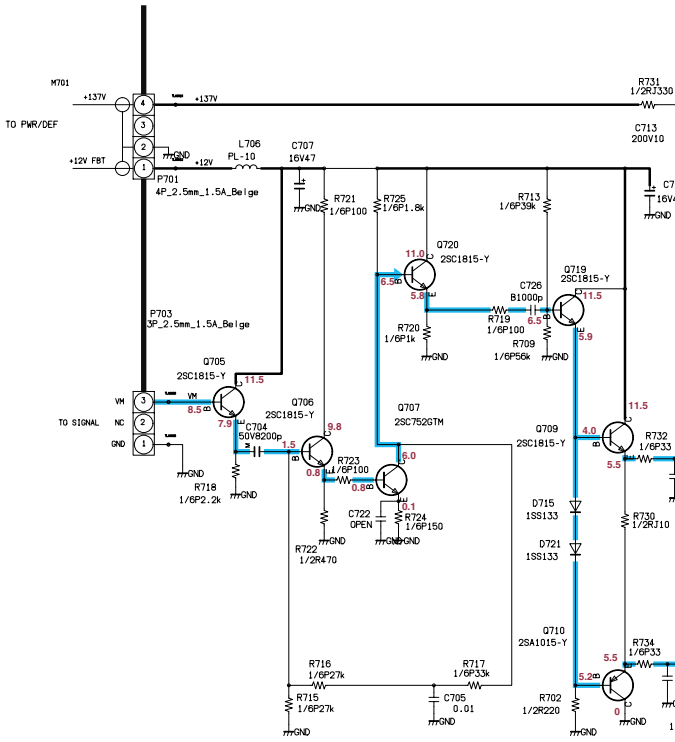

150V(p-p)(H)
125V(p-p)(H)
3.5V(p-p) (H)
3.4V(p-p) (H)
3.6V(p-p) (H)
P902
8P_2.5mm_1.5A_Beige
L908
10u COILTRF4100AT
GJ04
0.6
To C720 GND
Q908
2SC2120-Y
D901
1SS133
D907
1SS133
D908
1SS133
D909
1SS133
TP-47R
TP-46R
TP-46G
TP-46B

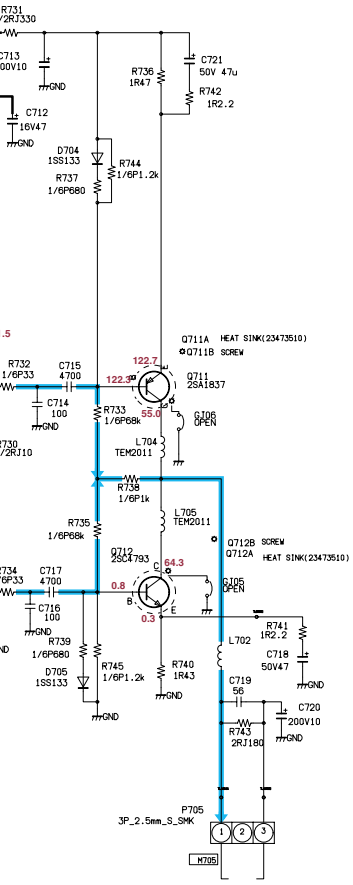


34HF83
CRT-D_SVM_HF - CRT DRIVE
[SHEET-1/2]



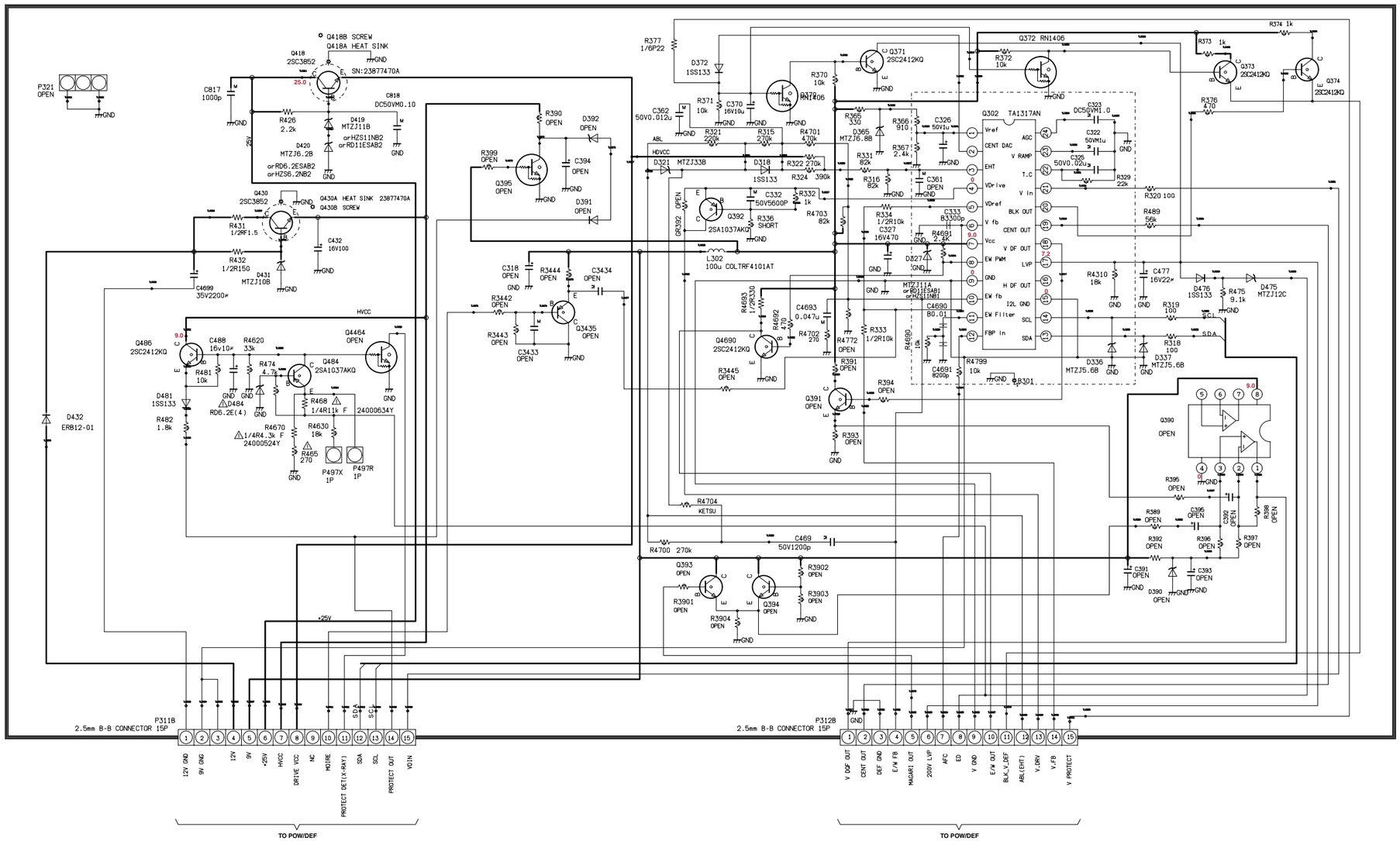
34HF83
CRT-D_SVM_HF - SVM
[SHEET-2/2]


M701
+137V
+137V
TO PWR/DEF
+12V FBT
GND
+12V
P701
4P_2.5mm_1.5A_Beige
L706
PL-10
C707
16V47
R731
1/2R3330
C713
200V10
R721
1/6P100
R725
1/6P1.8k
R713
1/6P39k
Q720
2SC1815-Y
Q719
2SC1815-Y
C726
B1000p
R719
1/6P100
R720
1/6P1k
R709
1/6P56k
P703
3P_2.5mm_1.5A_Beige
Q705
2SC1815-Y
VM
NC
GND
TO SIGNAL
Q706
2SC1815-Y
C704
5DV8200p
R723
1/6P100
R718
1/6P2.2k
Q707
2SC752GTM
Q709
2SC1815-Y
R732
1/6P33
R730
1/2RJ10
C722
OPEN
R724
1/6P150
R722
1/2R470
D715
1SS133
D721
1SS133
Q710
2SA1015-Y
R734
1/6P33
R716
1/6P27k
R717
1/6P33k
R715
1/6P27k
C705
0.01
R702
1/2R220



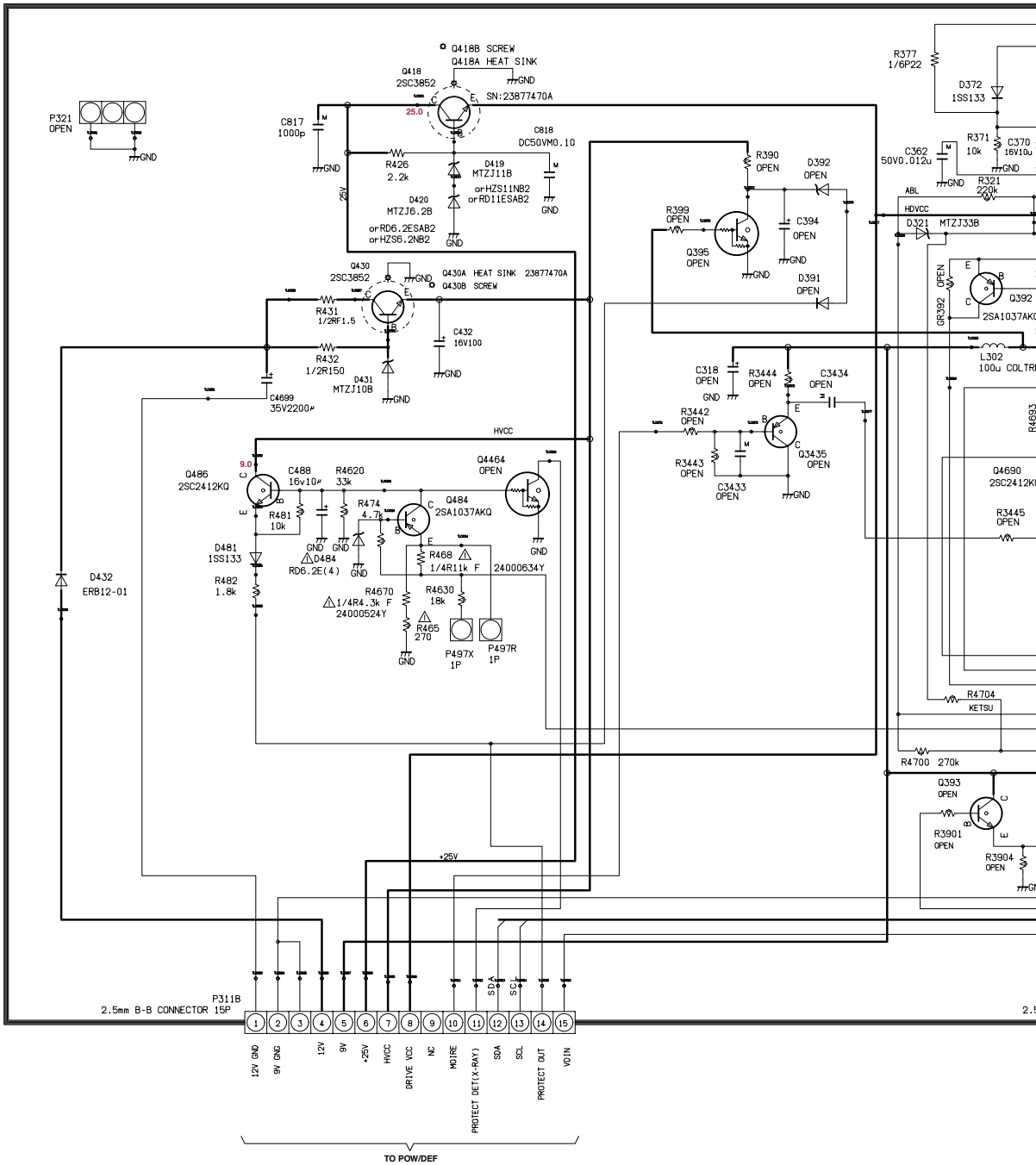
34HF83
CRT-D_SVM_HF - SVM
[SHEET-2/2]

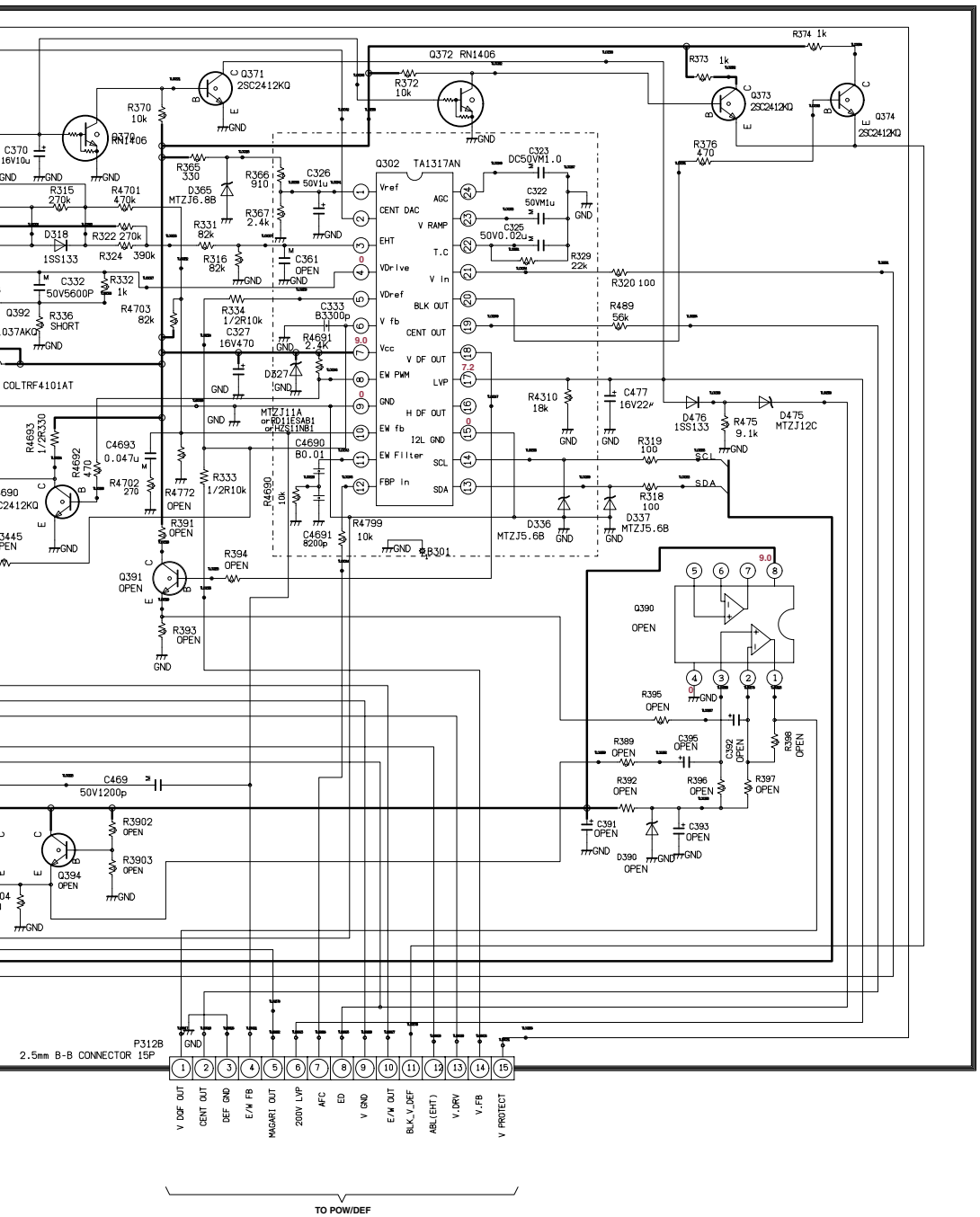
U903 VERTICAL



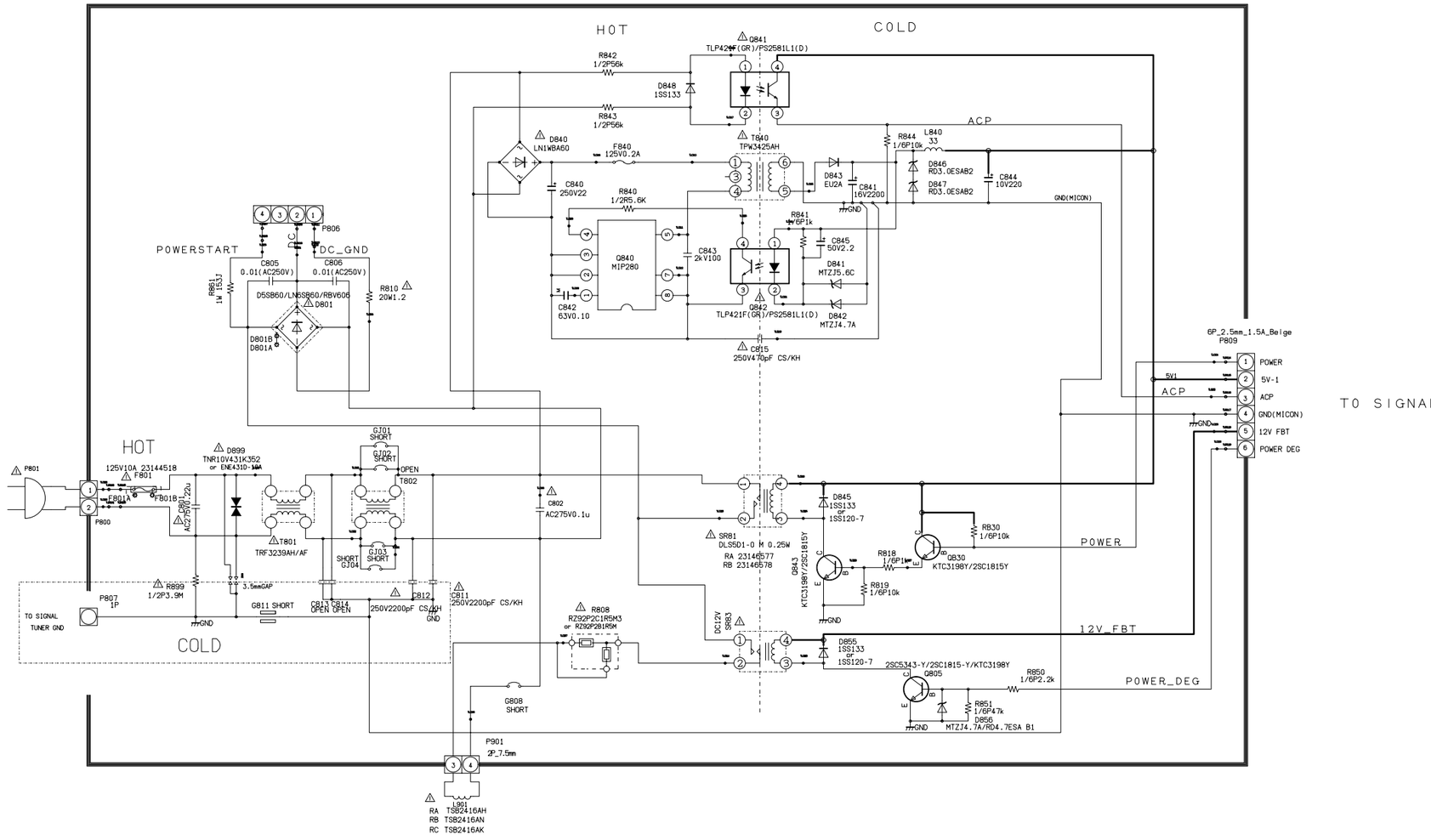
34HF83
VERTICAL

U903 VERTICAL

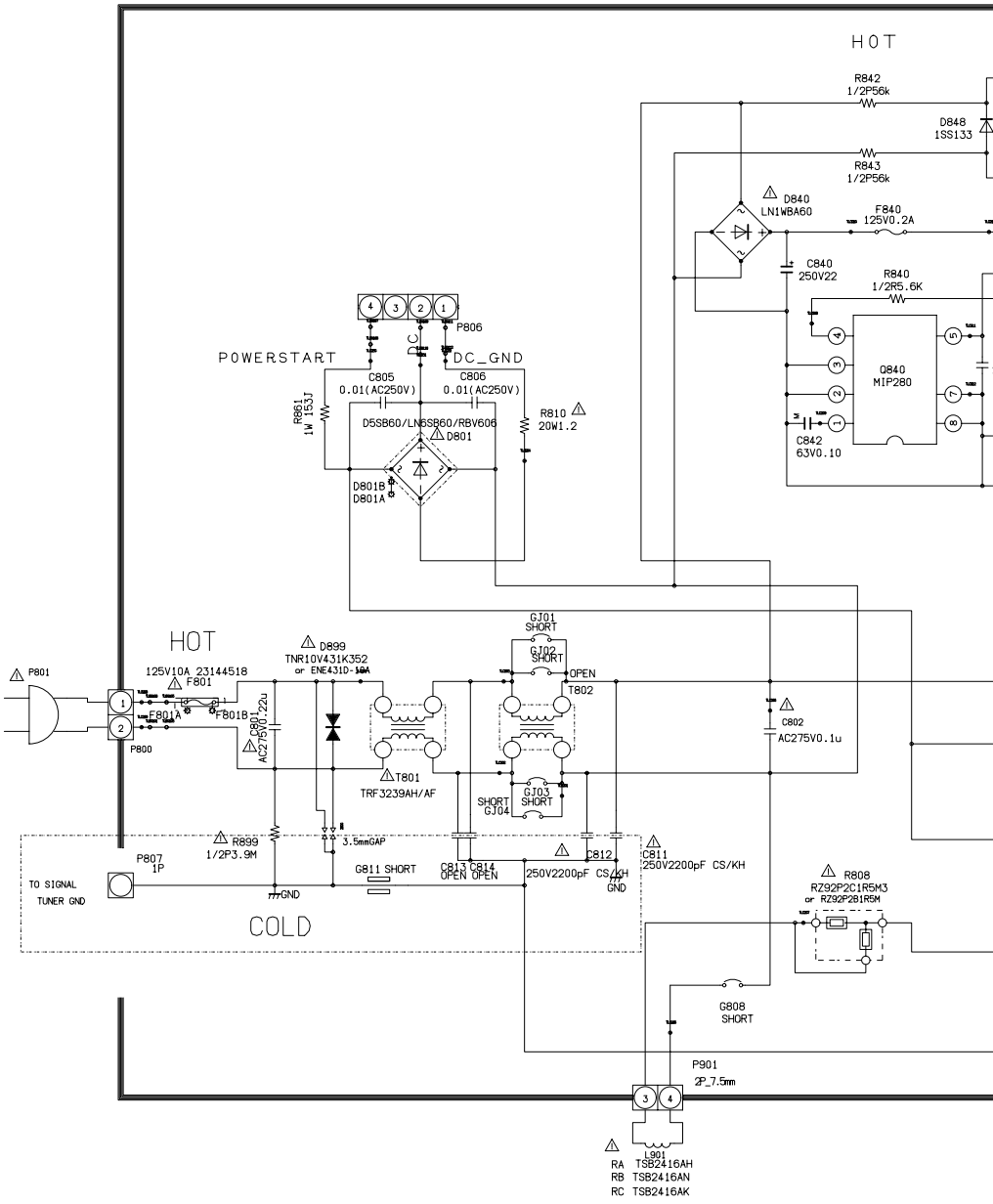


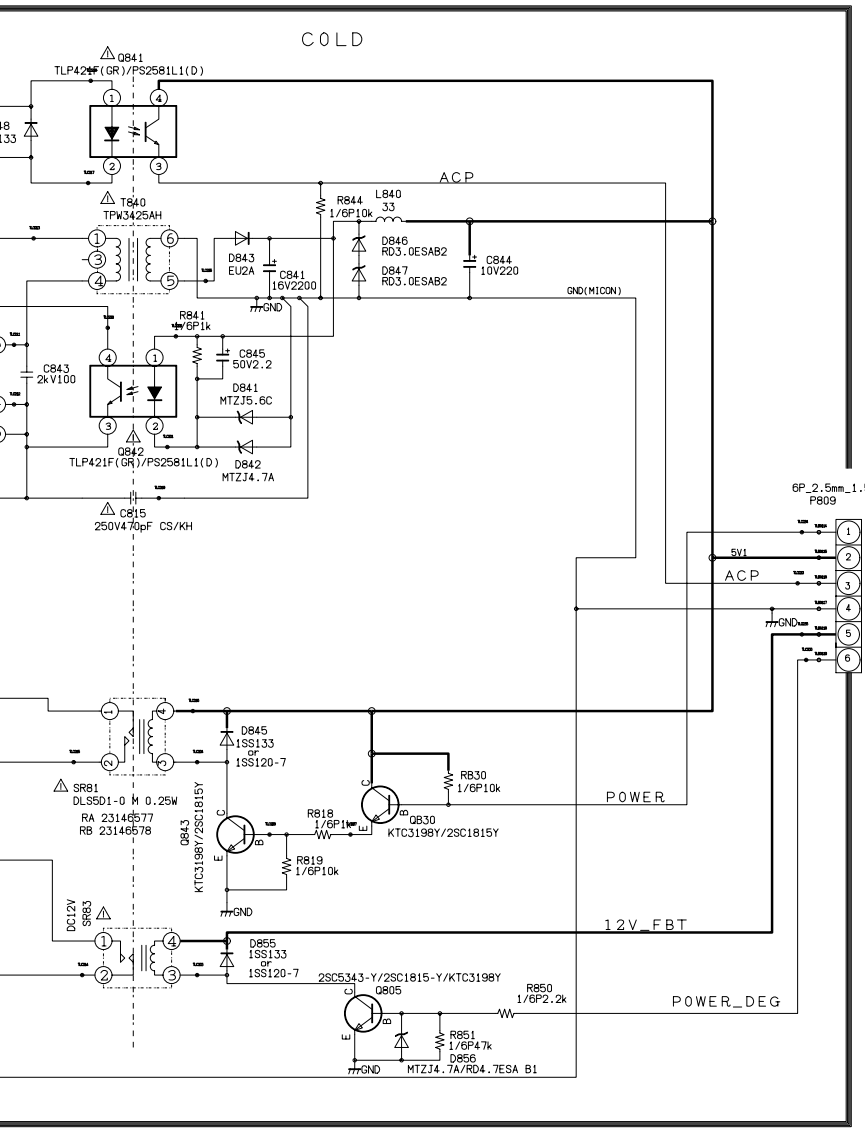


34HF83
VERTICAL



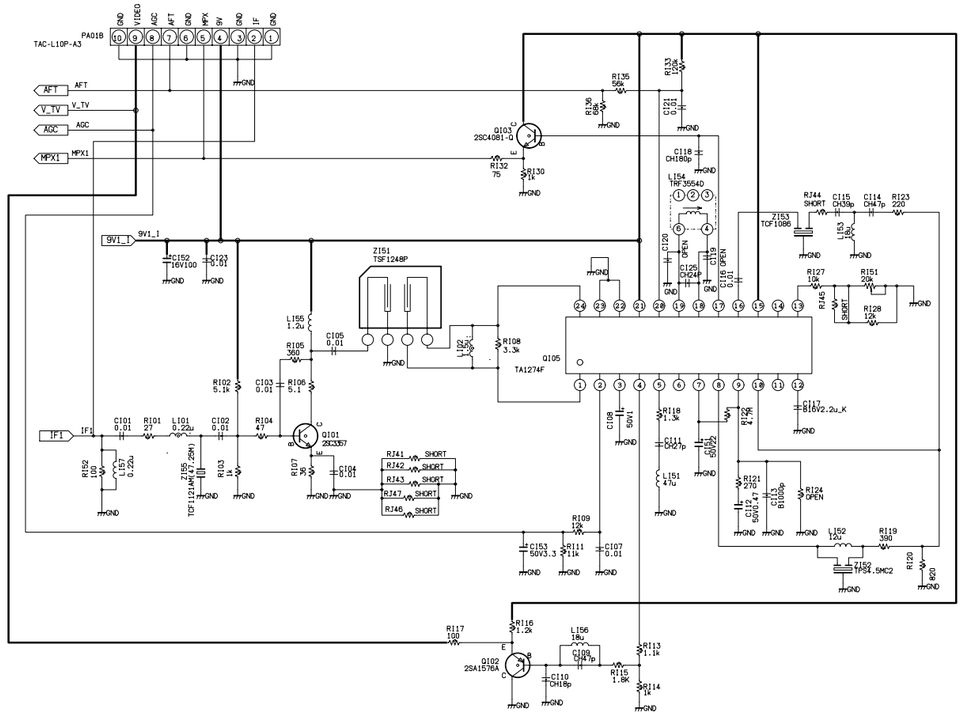
34HF83
AC INPUT


HOT
R842
1/2P56k
D848
1SS133
R843
1/2P56k
D840
LN1WBA60
F840
125V0.2A
C840
250V22
R840
1/2R5.6K
Q840
MIP280
C842
63V0.10
P806
POWERSTART
DC_GND
C805
0.01(AC250V)
C806
0.01(AC250V)
R861
1W 153J
D5SB60/LN6SB60/RBV606
D801
R810
20W1.2
D801B
D801A
HOT
125V10A 23144518
F801
P801
P800
F801A
F801B
C801
AC275V0.22u
D899
TNR10V431K352
or ENE431D-14A
T801
TRF3239AH/AF
GJ01
SHORT
GJ02
SHORT
OPEN
T802
GJ03
SHORT
SHORT
GJ04
C802
AC275V0.1u
R899
1/2P3.9M
3.5mmGAP
P807
1P
TO SIGNAL
TUNER GND
GND
G811 SHORT
C813 C814
OPEN OPEN
C812
250V2200pF CS/KH
GND
C811
250V2200pF CS/KH
R808
RZ92P2C1R5M3
or RZ92P2B1R5M
COLD
G808
SHORT
P901
2P_7.5mm
L901
RA TSB2416AH
RB TSB2416AN
RC TSB2416AK

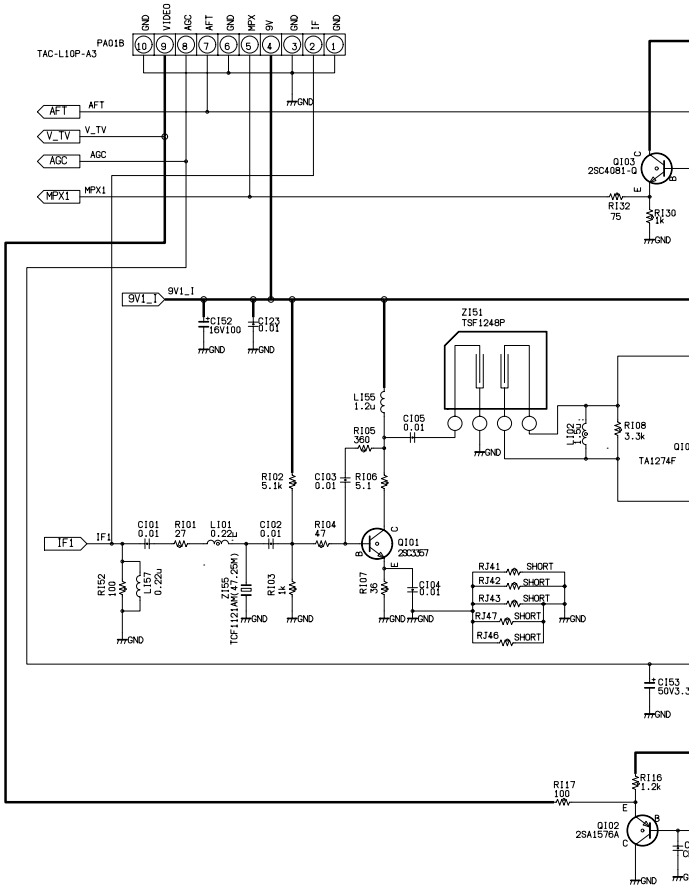


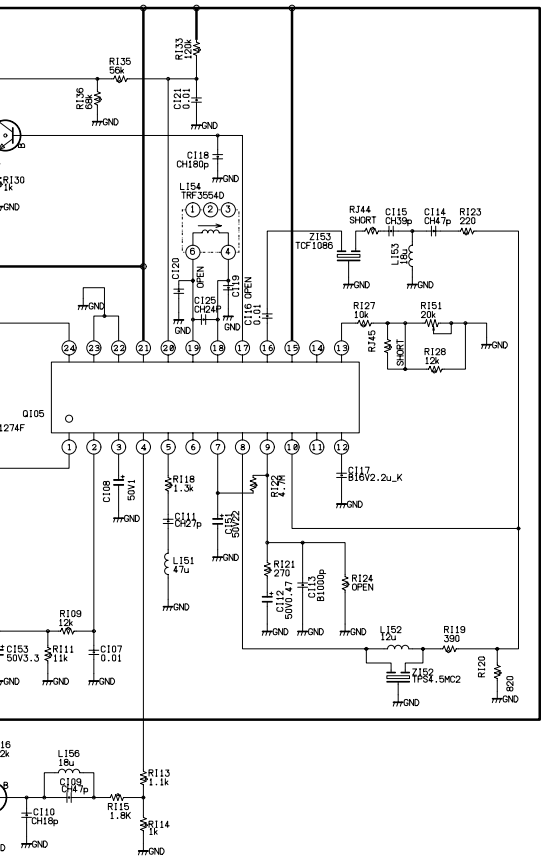
TO SIGNAL

34HF83
AC INPUT

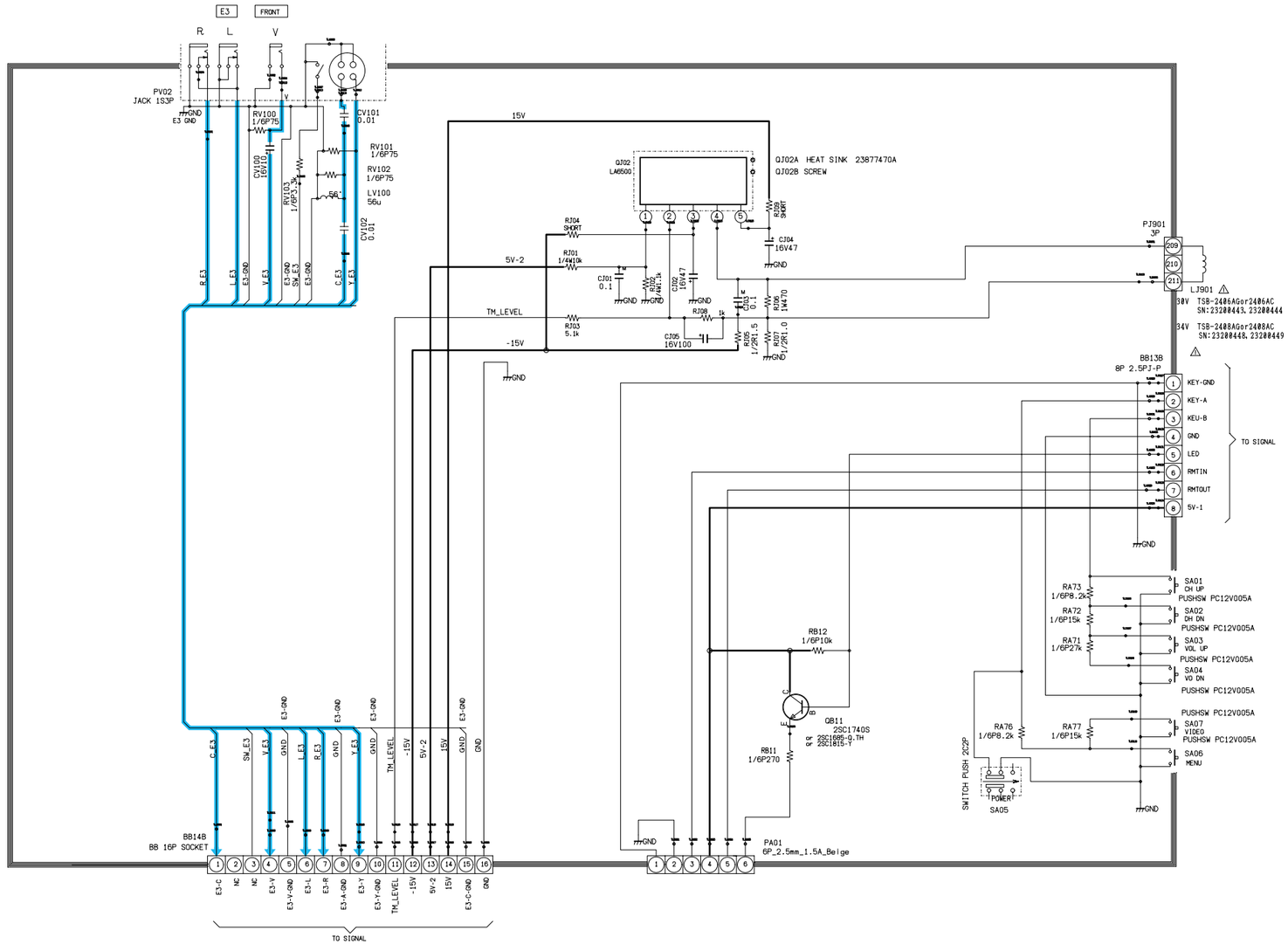

PA01B
TAC-L10P-A3
GND VIDEO AGC AFT GND MPX 9V GND IF GND
AFT
V_TV
AGC
MPX1
9V1_I
IF1
Z151 TSF1248P
Q105 TA1274F
Q103 2SC4081-Q
Q101 2SC3357
Q102 2SA1576A
Z153 TCF1086
Z152 TPS4.5MC2
L155 1.2u
L101 0.22u
L157 0.45u
L154 TRF3564D
L156 18u
L151 47u
L152 12U
C101 0.01
C102 0.01
C103 0.01
C104 0.01
C105 0.01
C106 0.01
C107 0.01
C108 50V1
C109 CH18p
C110 CH180p
C111 CH24p
C112 50V2.47
C113 B1000p
C114 CH47p
C115 CH39p
C116 OPEN
C117 B10V2.2u_K
C118 CH180p
C119 OPEN
C120 OPEN
C121 0.01
C150 16V100
C151 50V2.2
C152 16V100
C153 50V3.3
R101 27
R102 5.1k
R103 1k
R104 47
R105 360
R106 5.1
R107 30
R108 3.3k
R109 12k
R110 11k
R111 11k
R112 1.2k
R113 1.1k
R114 1k
R115 1.8K
R116 1.2k
R117 100
R118 1.3k
R119 390
R120 820
R121 270
R122 4.7k
R123 220
R124 OPEN
R125 OPEN
R126 OPEN
R127 10k
R128 12k
R129 OPEN
R130 1k
R131 OPEN
R132 75
R133 OPEN
R135 5.6k
R136 OPEN
R137 OPEN
R138 OPEN
R141 SHORT
R142 SHORT
R143 SHORT
R144 SHORT
R145 SHORT
R146 SHORT
R147 SHORT
R151 20k
R152 100
GND

34HF83
IF

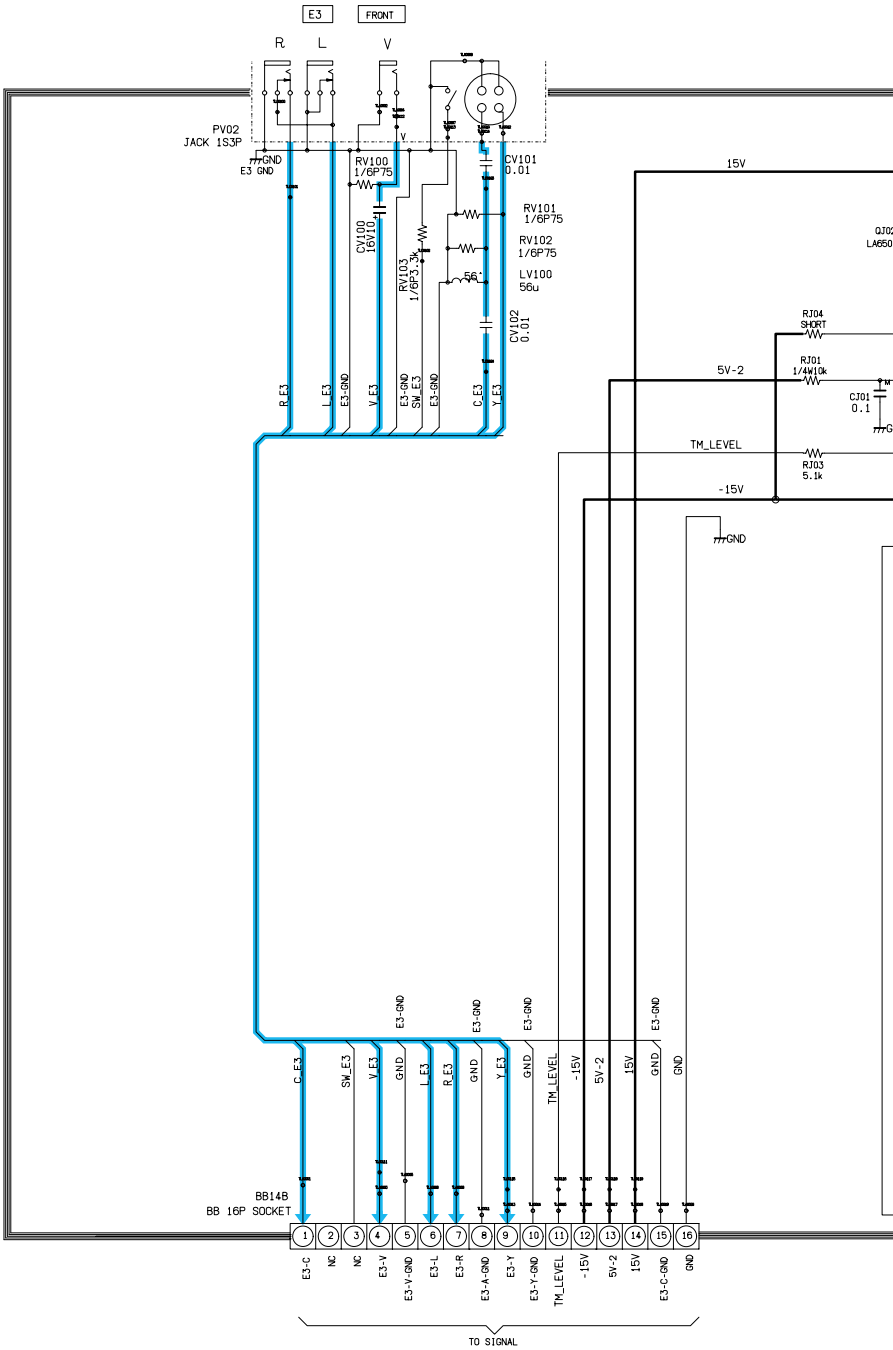

PA01B
TAC-L10P-A3
GND
VIDEO
AGC
AFT
GND
MPX
9V
GND
IF
GND
AFT
V_TV
AGC
MPX1
9V1_I
CI52
16V100
CI23
0.01
Z151
TSF1248P
L155
1.2u
CI05
0.01
RI05
360
RI02
5.1k
CI03
0.01
RI06
5.1
IF1
CI01
0.01
RI01
27
LI01
0.22u
CI02
0.01
RI04
47
Q101
2SD357
RI52
100
LI51
0.22u
Z155
TCF1121AM(47.25M)
RI03
1k
RI07
36
CI04
0.01
RJ41
SHORT
RJ42
SHORT
RJ43
SHORT
RJ47
SHORT
RJ46
SHORT
Q103
2SC4081-Q
RI32
75
RI30
1k
RI08
3.3k
TA1274F
CI53
50V3.3
RI16
1.2k
RI17
100
Q102
2SA1576A

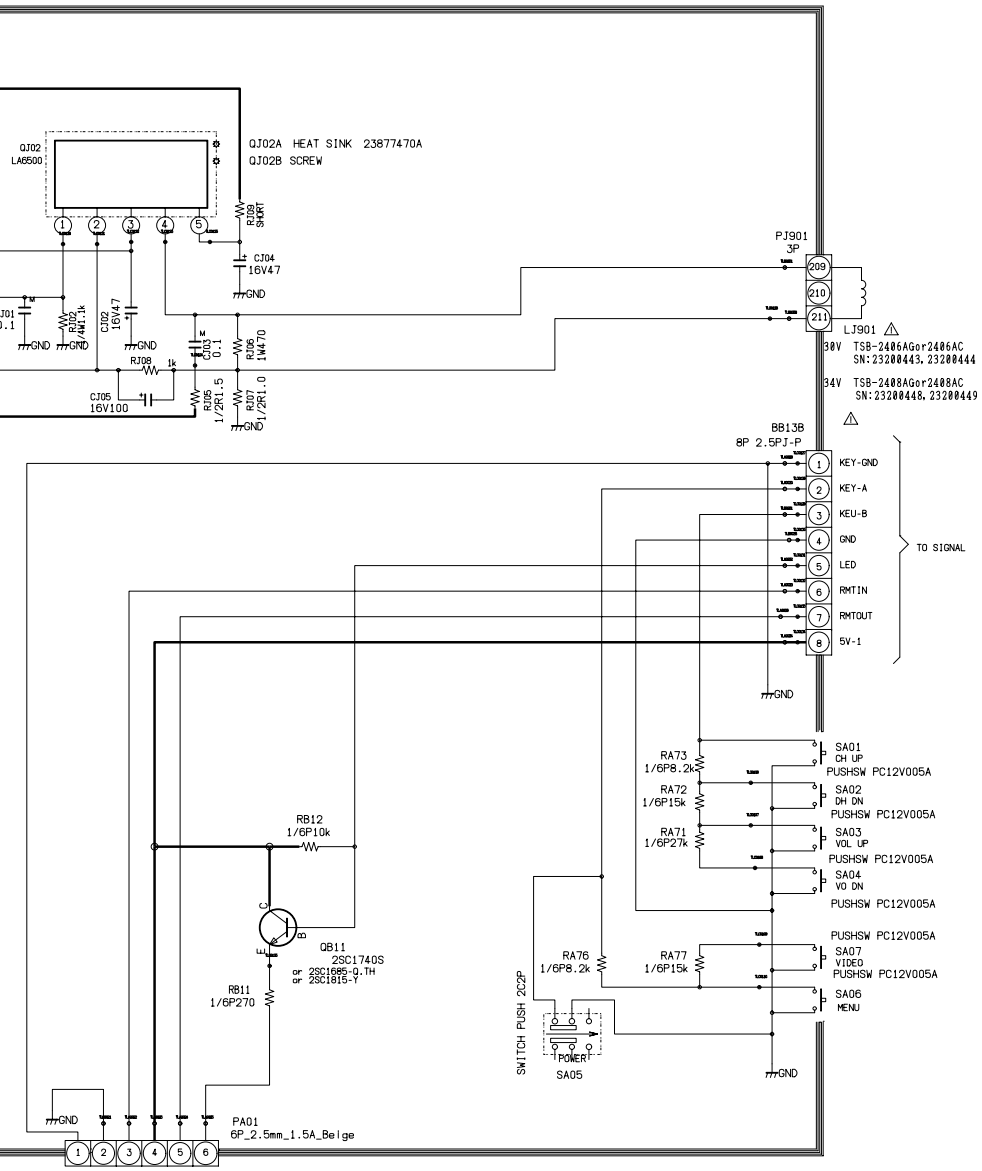

R135 56k
R136 68k
GND
R133 120k
C121 0.01
C118 CH180p
L154 TNF3554D
RJ44 SHORT
C115 CH39p
C114 CH47p
R123 220
Z153 TCF1086
L153 18u
C120 OPEN
C119 OPEN
C125 CH24P
C116 OPEN 0.01
R127 10k
R151 20k
RJ45 SHORT
R128 12k
Q105 1274F
C108 50V1
R118 1.3k
C111 CH27p
C112 50V22
R122 4.7K
C117 B16V2.2u_K
L151 47u
R121 270
C113 50V0.47
C103 B1000p
R124 OPEN
R109 12k
C153 50V3.3
R111 11k
C107 0.01
L152 12u
R119 390
Z152 TPS4.5MC2
R120 820
L156 18u
C109 CH47p
C110 CH18p
R115 1.8K
R113 1.1k
R114 1k

34HF83
IF

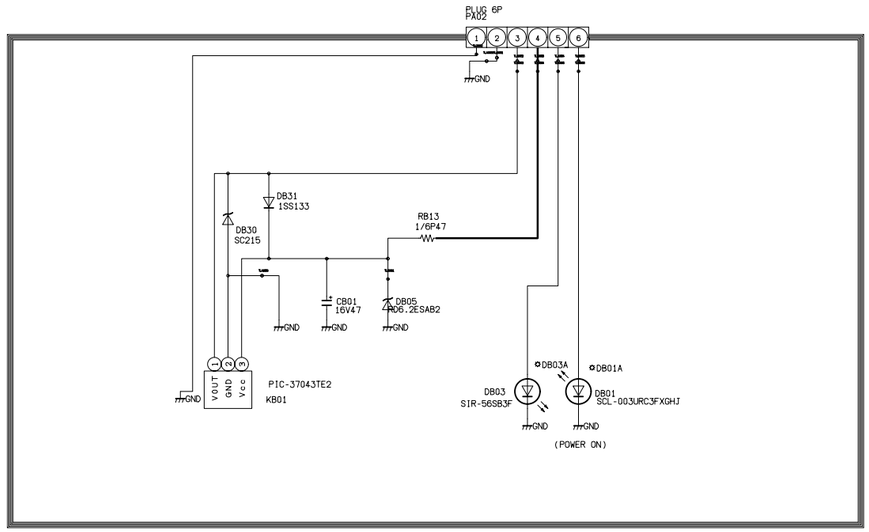


34HF83
CONTROL

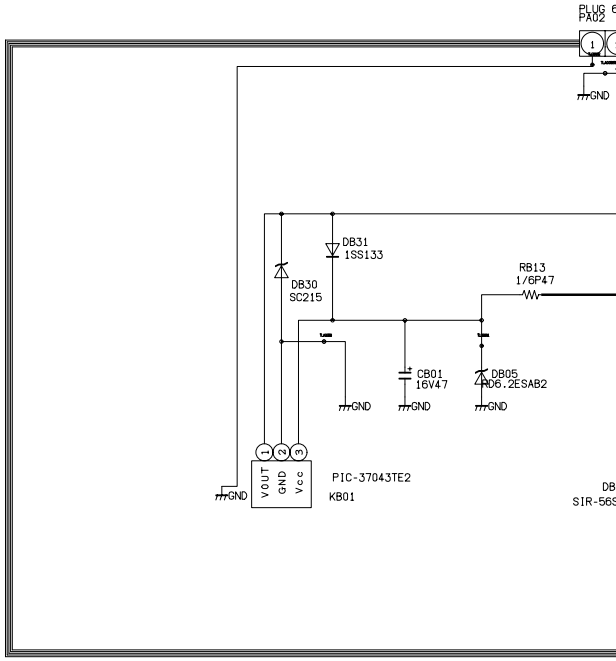

E3
FRONT
R
L
V
PV02
JACK 1S3P
GND
E3 GND
RV100
1/6P75
CV100
16V10
RV103
1/6P3.3k
56
LV100
56u
CV101
0.01
RV101
1/6P75
RV102
1/6P75
CV102
0.01
15V
5V-2
TM_LEVEL
-15V
RJ04
SHORT
RJ01
1/4W10k
RJ03
5.1k
CJ01
0.1
R_E3
L_E3
E3-GND
V_E3
E3-GND
SW_E3
E3-GND
C_E3
Y_E3
C_E3
SW_E3
V_E3
GND
L_E3
R_E3
GND
Y_E3
GND
TM_LEVEL
-15V
5V-2
15V
GND
GND
BB14B
BB 16P SOCKET
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
E3-C
NC
NC
E3-V
E3-V-GND
E3-L
E3-R
E3-A-GND
E3-Y
E3-Y-GND
TM_LEVEL
-15V
5V-2
15V
E3-C-GND
GND
TO SIGNAL

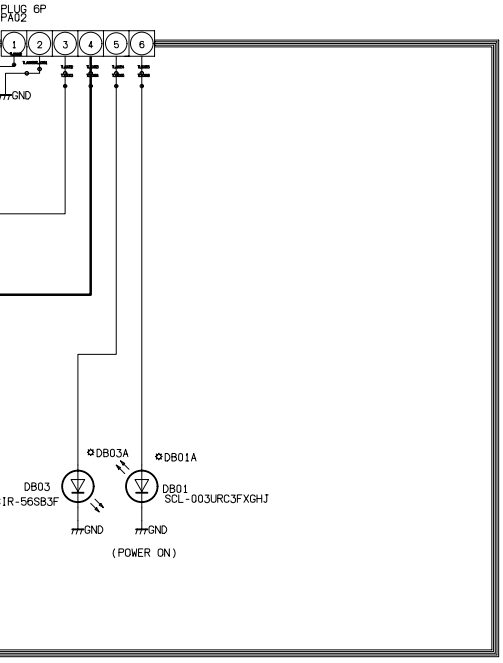


34HF83
CONTROL


PLUG 6P
PA02
1
2
3
4
5
6
GND
DB31
1SS133
DB30
SC215
RB13
1/6P47
CB01
16V47
DB05
RD6.2ESAB2
GND
GND
GND
VOUT
GND
Vcc
PIC-37043TE2
KB01
GND
DB03A
DB01A
DB03
SIR-56SB3F
DB01
SCL-003URC3FXGHJ
GND
GND
(POWER ON)

34HF83
LED


PLUG 6
PA02
1
GND
DB31
1SS133
DB30
SC215
RB13
1/6P47
CB01
16V47
DB05
RD6.2ESAB2
GND
GND
GND
1
2
3
VOUT
GND
Vcc
PIC-37043TE2
KB01
GND
DB
SIR-569


PLUG 6P
PA02
1
2
3
4
5
6
GND
DB03A
DB01A
DB03
IR-56SB3F
DB01
SCL-003URC3FXGHJ
GND
GND
(POWER ON)

34HF83
LED